

Yorkshire Philosophical Society.

ANNUAL REPORT

FOR

MCM I.



ANNUAL REPORT
OF THE COUNCIL
OF THE
YORKSHIRE
PHILOSOPHICAL SOCIETY

FOR

M C M I .

PRESENTED TO THE ANNUAL MEETING,

FEBRUARY 10TH, 1902.



YORK :
COULTAS & VOLANS, PRINTERS, LITTLE STONEGATE.

1902.

TRUSTEES
OF
THE YORKSHIRE MUSEUM.
APPOINTED BY ROYAL GRANT.

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GEORGE A. AUDEN, M.D.

LORD DERAMORE.

CHAS. E. ELMHIRST.

GEORGE S. GIBB, LL.B.

EDWIN GRAY, LL.M.

WILLIAM LAWTON.

T. S. NOBLE.

PATRONS
OF THE
Yorkshire Philosophical Society.

HIS MAJESTY THE KING.

HER MAJESTY THE QUEEN.

H.R.H. THE PRINCE OF WALES.

H.R.H. THE PRINCESS OF WALES.

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HON. TREASURER :

EDWIN GRAY, LL.B.

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THE REV. J. SOLLOWAY, M.A.

HON. SECRETARIES :

TEMPEST ANDERSON, M.D.

CHAS. E. ELMHIRST.

CURATORS :

ARCHÆOLOGY	- - - - -	{ T. BOYNTON, F.S.A. The Rev. W. HAWORTH, F.S.A.
GEOLOGY	- - - - -	J. F. WALKER, M.A., F.G.S.
MINERALOGY	- - - - -	W. H. HUDLESTON, M.A., F.R.S.
COMPARATIVE ANATOMY	- -	T. ANDERSON, M.D., B.Sc.
ORNITHOLOGY	- - - - -	J. BACKHOUSE, F.Z.S., M.B.O.U.
BOTANY	- - - - -	H. J. WILKINSON.
OBSERVATORY	- - - - -	T. S. NOBLE.
METEOROLOGY	- - - - -	THE REV. W. JOHNSON, B.A., B.Sc.
LABORATORY	- - - - -	J. F. WALKER, M.A., F.I.C., F.C.S., London and Berlin.

GARDEN COMMITTEE :

BOWDEN CATTLEY,

J. MELROSE, J.P.

SIR C. A. MILWARD.

THE SECRETARIES (*ex-officio.*)

LECTURE COMMITTEE :

THE REV. E. S. CARTER.

G. S. GIBB, LL.B.

R. THOMPSON.

THE SECRETARIES (*ex-officio.*)

KEEPER OF THE MUSEUM :

HENRY MAURICE PLATNAUER, A.R.S.M., B.Sc.

REPORT OF THE COUNCIL
OF THE
YORKSHIRE PHILOSOPHICAL SOCIETY.

FEBRUARY 10TH, 1902.

THE Council has, with deep regret, to record the death of its patron during the past year. A special vote of condolence on the death of our Royal Patroness, Queen Victoria, and of sympathy with King Edward VII., was passed at the Annual Meeting and graciously acknowledged. Queen Victoria had occupied this position since 1835. The Society was fortunate in securing a continuance of the Patronage of both His Most Gracious Majesty the King, and Queen Alexandra, who as Prince and Princess of Wales became Patrons in 1866. The letters expressing their willingness to continue this favour have been duly entered on the Society's minutes as a record of the facts.

In summarizing the doings of the past year, the Council is fortunate in being able to report steady progress. The item that chiefly calls for special comment is the continued excavation in the Choir of S. Mary's Abbey Church. This work has been steadily pushed forward and the portions of the wall exposed have been put into a condition to withstand weather, but no attempt at "restoration" has been made. A review of the results of the work will be found in the latter part of this report.

One of the most interesting events in the city's history was the discovery in Bootham of a Roman coffin containing indisputable proof of the local acceptance of Christianity during the early Roman occupation of York. The coffin contained a bone tablet inscribed as follows:

"Soror ave in Deo vivas."
(Farewell, Sister! live in God!)

We would emphasize the thanks of the Society already tendered to Mr. E. Taylor for the presentation of this most interesting relic, a further description of which will be found in the Report of the Hon. Curator of Archæology.

Inscriptions have been prepared during the past year, by your Council, to be placed on the four principal Bars of the City. These have been adopted by the City Council and that on Bootham Bar is already affixed. They are designed to call attention to a few of the chief historic events which are associated with each Bar.

The Society has again been fortunate in having an admirable series of papers and lectures. At the monthly meetings the following subjects were treated :—

“Cave Exploration in Yorkshire.” By W. Cuttriss.

“The Evil Eye.” By H. M. Platnauer.

“Variation.” By W. Hewett.

“William Etty.” By Miss Moore.

“Nature through the Microscope.” By Rev. T. A. Brode.

“A recently found Roman Coffin.” By H. M. Platnauer.

“Literary Frauds and Forgeries.” By G. Cecil Fry.

The lectures delivered on Thursday evenings were as follows :—

Thursday, January 3rd.—“South African Experiences” (Illustrated by Lantern Photographs, and objects collected during the siege of Ladysmith). By the Rev. J. Tuckey, Chaplain to the Forces.

Thursday, January 17th.—“The Dales and Coast of Yorkshire” (With Lantern Illustrations). By Godfrey Bingley, President of the Leeds Geological Association.

Thursday, January 31st.—“Britain in its Desert condition” (With Lantern Illustrations). By J. G. Goodchild, F.G.S., of the Edinburgh Museum.

Thursday, February 14th.—“Arolla and the Boquetins” (With Lantern Illustrations). By the Rev. L. S. Calvert, Member of the Alpine Club.

Wednesday, February 20th, extra lecture.—“Wordsworth’s Country” (With Lantern Illustrations). By Percy Lund, Editor of the *Practical Photographer*.

Thursday, February 28th.—“ Research and Discovery in the Holy Land ” (With Lantern Illustrations). By the Rev. Thos. Harrison, M.A.

Thursday, March 14th.—“ The Far West ” (With Lantern Illustrations). By Tempest Anderson, M.D.

Thursday, March 28th.—“ More Lost and Disappearing Animals ” (With Lantern Illustrations). By Chas. E. Elmhirst.

Thursday, October 10th. — Reading from Shakespeare, “ Merchant of Venice.” By the Rev. Canon Fleming.

Thursday, October 24th.—“ Southern Norway (Lakeland) ” (Illustrated by Lantern Pictures). By Paul Lange, Ex-President of the Liverpool Photographic Society.

Thursday, November 7th.—“ From the Mine to the finished War Ship ” (With Lantern Illustrations). By J. W. C. Haldane, M.I.Mech.E., Civil and Mechanical Consulting Engineer.

Thursday, November 21st.—“ The Homeric Woman.” By Thomas Marshall, M.A.

Thursday, December 5th.—“ Tannhäuser ” (With Illustrations). By the Rev. R. O. Hutchinson, M.A.

Thursday, December 19th.—“ From Quetta to London, Overland ” (With Lantern Illustrations). By Edward Penton, B.A., F.R.G.S.

It must be remembered that all the above papers and lectures were given by volunteers. The Council owes a considerable debt of gratitude to those whose kind and efficient aid has provided our members with a thoroughly attractive programme at no further cost to the Society than a small amount for necessary expenses.

The reports of the Honorary Curators which follow will sufficiently amplify this general report.

Mention should also be made of a Garden Party given by the Council to the Members of the Society. This function was well attended and gave considerable satisfaction. Bands played in the gardens on several occasions and appeared to be appreciated by the Members.

Turning to the financial condition of the Society, the Report is not so satisfactory. We are faced by the unpleasant fact that our expenditure has exceeded our income by nearly £50. There is a simple and perfectly satisfactory explanation of this fact, but the statement is one that a managing body cannot make with cheerfulness. A brief examination of our financial statement, however, will shew that there is absolutely no cause for any uneasiness. The income for 1900 was £1353 18s. 3d., that for last year, £1248 5s. od. But it must be remembered that the income for 1900 included £100 from the Bulmer bequest and a donation of £20 from the Rev. W. Haworth, while the past year's income contains no item that is not of ordinary occurrence. Comparing these ordinary items, we find that on these our income for the past year shews an increase of nearly £15 on that of the year before. The gate money shows a substantial increase and the tent has proved a useful source of revenue. But it is disappointing to note that the members' subscriptions are £20 less than in 1900. This is not due to diminution in our numbers; the Society has an accession of 52 to place against a loss of 48; it is owing to a curious and inexplicable disinclination on the part of some of our members to pay at the proper time. The Council desires to take this opportunity of pointing out the extreme inconvenience that arises from this irregularity, and begs of all members to assist in simplifying matters by punctual payment of subscriptions—which are payable in advance on January 1st of each year.

While our financial statement shews no extraordinary item of income, it does shew an unusual item of expenditure, and one that fully accounts for our deficit, viz.: the excavations in the Abbey Church referred to before. The amount expended on this amounts to over £75, and it will be at once seen that had not the Council actively pushed this important and interesting work, instead of an adverse balance of £50 we should have had a surplus of £25. Valuable as is the work of excavation, it becomes a question whether the Council should prosecute it without an appeal for external assistance to supplement the sorely strained resources of the Society. We are still faced by several urgent needs, the most important of

which are the diminution or extinction of our debt (towards which we are paying £200 a year); increased space for storage of specimens; and a larger and better constructed Lecture Theatre.

The Society continues to afford help to local associations for the advancement of knowledge by allowing them the use of its premises free of charge. This help is fully appreciated.

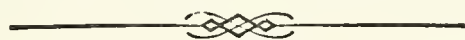
The York Medical Society, the York Branch of the University Extension, the York Branch of the National Association for the Prevention of Consumption, and the York and District Field Naturalists are among the Societies which we have thus been able to help.

The permission granted to the Managers and Teachers of Elementary Schools in the City to bring classes into the Museum for purposes of study has been continued, and various schools have availed themselves of it during the course of the year.

At the last Annual Meeting the Council obtained the consent of the Society to a plan that had been in operation for a few months: that of having Student Associates connected with the Museum. By this scheme any one who can shew that he is engaged in original research in subjects illustrated by our collections, can obtain from the Hon. Secretaries a ticket entitling him to access to the Museum and Library, during such times as they are open, for six months; and this ticket may be renewed for further periods of six months at discretion. It is of course understood that only those who are not in a position to join the Society as Members or Associates should avail themselves of this scheme. The Council is earnestly desirous that no genuine worker should be debarred from making use of the rich store of material gathered together in our Museum, due regard being always paid to the privileges of those whose help has rendered possible the collection and conservation of these treasures.

The Council recommends the election of the Rt. Hon. the Lord Mayor, Mr. Geo. Benson, Mr. H. Richardson, and the Rev. J. Solloway, as Members of Council in place of the Rev. W. Johnson, Mr. Arthur Rowntree, Mr. H. Venn Scott, and Mr. H. C. Shann, who retire by rotation.

The Rt. Rev. the Bishop of Ripon, Principal Bodington, M.A., Lit.D., Professor G. B. Howes, LL.D., F.R.S., F.L.S., and Professor Silvanus P. Thompson, D.Sc., F.R.S., were elected Honorary Members of the Society.



ARCHÆOLOGY.—The year under review has been an interesting one from an archæological point of view. The excavations in the Choir of the Abbey Church have been pushed forward with excellent and most encouraging results. A detailed summary of the results will be found in the latter part of this report.

A stone coffin found in Sycamore Terrace, and presented to the Society by Mr. Edwin Taylor, proved to be a discovery of exceptional interest, as the interment was evidently a Christian one. The extreme rarity of Christian memorials of the earlier half of the Roman occupation makes this find a most valuable one. The general style of the coffin, and of the articles buried in it, is that of the third century of this era. Some further details will be given later.

Some extensive alterations in the Theatre Royal caused the exposure,—and we are sorry to add, the removal—of the remains of the crypt of St. Peter's Hospital. We hope that the barbarity of those who permitted the destruction of this interesting relic of Norman work will not escape public notice and censure.

The Society has also acquired (by purchase) an interesting series of Roman vessels found about the beginning of the last century on the Mount. They were associated with an inscribed coffin which contained the remains of Theodorianus of Nomentum. The coffin and skull found in it have been for many years in the possession of the Society; it is therefore gratifying to record that we now have the rest of the objects then found.

The Curators wish to remark that while the Society is willing, when absolutely necessary, to purchase at a reasonable cost, antiquities found in York and its neighbourhood, the possessors of these should bear in mind that the primary object of the Society, in providing a home for such antiquities as may

be of general interest to the public, is purely of a philanthropic and educational nature. They would therefore urge upon all who possess objects of the above nature to shew their generosity and public spirit by presenting them to this Society, which deserves, from its record in the past, a somewhat different treatment to that accorded to a private collector. They would also remind all who have a genuine interest in Archæology, that objects in our collections have two advantages that no private collector can ensure,—a permanent home and general accessibility.

An attempt is now being made, with the valuable co-operation of Mr. J. F. Walker, to improve our very imperfect collection of Victorian silver. The Curators will be grateful to any members of the Society, or others, who will hand over to them—either as gifts or at face value—any coins of the earlier years of this period which may come into their possession in good condition.

COMPARATIVE ANATOMY.—The Collections in this Department are in good order. The chief need, if this Department is to grow, is more space, both for storage and for exhibition. Until the latter is obtained it is impossible to make any addition to specimens on view, an unfortunate state of affairs as it means the total exclusion of mounted specimens, which always add to the interest and utility of collections such as ours.

GEOLOGY.—The Honorary Curator reports that during the past year donations have been received from Herr Dr. Pfarrer Engel, Mr. M. B. Cotsworth, and Mr. Hugh Richardson. The Society's Museum now contains a fine typical series of Muschelkalk fossils. Specimens have been lent for description to Mr. A. C. Seward, M.A., F.G.S.; the Rev. J. F. Blake, M.A., F.G.S.; and Mr. H. Woods, M.A., F.G.S.

BOTANY.—The work done in this Department during the year 1901 will be found recorded on pp. 65—78.

A list of the interesting additions to the Herbarium will be found on page 32.

MINERALOGY.—The additions to this Department consist of specimens of Yttro-Gummite, Columbite, Samarskite, Howlite, Wükitite, Thorite, Colemanite, Pandermanite, and Natro-Borocalcite, generously given us by Mr. U. B. Giles in exchange for a small piece of Yorkshire Celestine.

ORNITHOLOGY.—Examples of the following birds have been cased and added to the collection: Coot, Common Gull, Little Grebe, Shag, Golden Eye, Crane, White-tailed Eagle, Kestrel, Garden Warbler, Black Tern, Goldfinch, Spotted Flycatcher, Reed Bunting, Wheatear, Rook, Linnet, Greenfinch, Woodcock, Corn Bunting, and Levantine Shearwater (*Puffinus Yelkonan*). The latter is a specially interesting addition, it may be best referred to in the words of the following quotation: "Throughout the Mediterranean and in the Black Sea, *Puffinus anglorum* is represented by *P. Yelkonan* of Acerbi (the 'âme damnée' of the Bosphorus) which is characterized by a larger amount of brown striation on the under tail-coverts and exhibits a more dusky tint on the upper parts."

LIBRARY.—The number of books added to the Library shews an increase on that of last year, indeed each year shews an advance in this respect on the one preceding it. The space difficulty will again confront us at no distant date. The shelves set apart for a ten year's expansion (calculated on the basis of additions in the past) are already overflowing in the case of the publications of the United States' Government, and in several other instances are not far from being filled.

There are several gaps in our series of Annual Reports. Members who have copies of the Annual Report for any of the following years:—1823, '24, '25, '26, '31, '43, '56, '58, '70, '82, would confer a favour by handing them back to the Librarian.

METEOROLOGY.—*Statistics of Station*: Longitude $1^{\circ} 5'$ W.; Latitude $53^{\circ} 57'$ N.; height above mean sea level, 56 feet.

Temperature during 1901 has had a smaller range by 6° , the mean annual temperature rising by $.1^{\circ}$ F., 48.7 as against 48.6. The lowest temperature was recorded on March 26th, when the absolute minimum thermometer read 19.0° F., and the highest reading was observed on July 18th and 19th, and August 10th, when a reading of 88.0° F. was taken. February and June were colder than the average, and an intensely cold period occurred during the anticyclone in November, in which month the actual reading was 6° less than in 1900.

A Mean Pressure of 29.935 inches has been recorded as against 29.885 inches for 1900, March and December being lowest with 29.764, 29.555 inches respectively, and May and November highest with 30.120 inches.

The extreme range of pressure is 1·954 inches as against 2·236 inches in 1900, the highest reading being 30·643 inches on November 24th, the lowest, 28·689 on Christmas Day, accompanying the disagreeable cyclone.

Rain or Snow (0·005 inches or over) fell on 197 days or 23 above the average, yet the total fall for the year is 5·42 inches below that of 1900. The heaviest fall of rain occurred on November 12th, when 1·60 inches fell, more by ·29 inches than on any day of 1900. Up to the end of October, the rainfall was abnormally small, but November and December together added 6·8 inches, or about 33% of the year's fall. September and July proved to be our driest months, and August, for once, gave little rain. December took the first place with 3·46 inches.

The cumulative totals since 1841 are now :—August 164·35 inches, October 162·89 inches, July 154·69 inches. Observations of the winds show that our chief air-currents come from W. (151), S. (148), N. (114), N.W. (78), S.W. (70).

It is impossible to show in the Report the interesting changes of barometric pressure, but the records of the barograph, in the Hall of the Museum, may be inspected.

PHOTOGRAPHIC SECTION.—This section has continued in a state of healthy activity during the past year. The attendance of Members at the Monthly Meetings has averaged rather more than 10, or more than one third of the number of Members, while there has been an average of about 2 Visitors to each Meeting. In the Autumn half of last year a greater interest has been aroused in the Meetings owing to the establishment of occasional competitions, each being confined to a special line of work. Also a Special Committee has been appointed to get together a Collection of Lantern Slides by Workers in the section, and chiefly illustrative of York and neighbourhood, to be presented, when complete, to the Affiliated Photographic Societies, of which the Section forms a unit. They will then circulate among other Photographic Societies, from whom criticism is invited. Any Members, Associates, or Lady Subscribers, or Members of the Families of the former, may join the Photographic Section by paying a Subscription of only 2/6 per annum, to the Hon. Secretary and Treasurer :

H. DENNIS TAYLOR,

STANCLIFFE, MOUNT VILLAS,

while others interested in Photography but *not* connected with the Y.P.S., may join the Section and attend their Meetings by paying an Annual Subscription of 5/- per annum.

THE TREASURER'S ACCOUNT IN CONNECTION WITH THE FUND FOUNDED BY THE LATE

WM REED, ESQ., FOR SPECIFIC PURPOSES.

Dr.	INCOME.		EXPENDITURE.		Cr.
		£ s. d.			£ s. d.
Interest on £600 York Corporation 3 % Redeemable Stock, less Income Tax	... ..	17 0 6	Books and Binding	... ..	18 5 6
Interest placed on deposit at York City & County Bk.	1 5 0				
		<hr/>			<hr/>
		£18 5 6			£18 5 6
		<hr/>			<hr/>
					15
BALANCE SHEET.					
Amount of Fund on 31st December, 1901	...	£ 687 19 2	Amount invested in York Corporation 3 per cent.		£ s. d.
			Redeemable Stock	... ..	600 0 0
			Amount placed on Deposit at York City and County Bank	... ..	50 0 0
			Cash in hand	... ..	37 19 2
		<hr/>			<hr/>
		£687 19 2			£687 19 2
		<hr/>			<hr/>

STATION, YORK.—THE MUSEUM.

Heights above Ground :—Barometer, 3 feet ; Thermometers, 4 feet ; Rain-gauge, 1 foot.

1901.	Amount of Cloud.			Rainfall.			Weather, No. of Days of							Wind, No. of Observations of								
	9 a.m.	9 p.m.	Mean	Total.	Max.	Day.	Rain.	Snow.	Hail.	Thunder Storm	Clear Sky.	Over-cast.	Gale.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calm
Jan.	6.5	6.6	6.6	ins. 1.00	ins. .44	19th	15	8	0	0	3	10	1	3	2	5	11	15	6	11	6	3
Feb.	7.3	8.4	7.9	1.72	.33	4th	20	11	1	0	2	18	0	21	3	1	1	7	2	8	13	0
Mar.	6.4	5.8	6.1	1.82	.54	29th	18	5	2	0	4	9	0	15	11	3	4	8	10	5	6	0
April	5.0	4.3	4.7	1.84	.50	8th	17	0	1	0	9	5	1	6	4	4	4	17	8	13	4	0
May	4.7	4.7	4.7	1.24	.53	7th	8	0	0	3	11	7	0	16	9	10	4	6	7	5	5	0
June	4.7	5.5	5.1	1.27	.37	20th	13	0	0	0	4	4	1	11	2	5	4	14	3	13	8	0
July	5.0	6.2	5.6	0.98	.32	25th	9	0	0	1	4	6	0	7	8	7	8	10	2	11	7	2
Aug.	5.0	4.5	4.8	1.35	.40	14th	12	0	0	4	7	6	0	6	0	2	4	15	6	21	7	1
Sept.	6.9	5.1	6.0	0.85	.25	21st	8	0	0	0	0	5	0	9	7	4	2	24	6	5	2	1
Oct.	6.7	6.2	6.5	1.65	.49	16th	13	0	0	0	4	14	0	6	2	3	7	14	12	6	5	7
Nov.	6.1	5.9	6.0	3.34	1.60	12th	13	1	0	0	6	13	1	9	1	5	5	4	1	25	9	1
Dec.	5.6	6.5	6.1	3.46	.76	28th	19	7	0	1	5	9	0	5	1	1	0	14	7	28	6	0
Year	5.8	5.8	5.8	20.52	—	—	165	32	4	9	59	106	4	114	50	50	54	148	70	151	78	15

RIVER HEIGHT RECORDS REGISTERED BY THE AUTOMATIC RECORDER AT THE GUILDHALL, YORK, 1901.

Date.	JANUARY.		FEBRUARY.		MARCH.		APRIL.		MAY.		JUNE.	
	Time.	Above or below S.L.	Time.	Above or below S.L.	Time.	Above or below S.L.	Time.	Above or below S.L.	Time.	Above or below S.L.	Time.	Above or below S.L.
1	1 a.m.	ft. in. 5 6	6 p.m.	ft. in. 1 3	12 p.m.	ft. in. 2 6	noon	ft. in. 5 1	1 a.m.	ft. in. 1 5	noon	ft. in. S. L.
2	"	3 1	noon	1 3	10 a.m.	3 3	1 a.m.	3 4	"	0 9	"	S. L.
3	"	1 7	12 p.m.	1 6	3 p.m.	3 10	12 p.m.	5 8	noon	0 6	1 a.m.	S. L.
4	12 p.m.	0 9	noon	1 8	1 a.m.	3 5	6 a.m.	6 1	"	0 5	noon	below 0 2
5	1 a.m.	0 9	1 a.m.	1 7	12 p.m.	7 3	1 a.m.	3 6	"	0 4	"	0 1
6	noon	0 5	noon	1 3	4 a.m.	7 6	9 p.m.	1 3	"	0 3	"	0 1
7	1 a.m.	0 5	"	1 3	1 a.m.	5 5	12 p.m.	2 9	"	0 5	"	0 1
8	noon	S. L.	"	1 2	"	4 6	"	3 9	"	0 4	"	0 1
9	"	S. L.	12 p.m.	1 9	2 a.m.	3 5	1 a.m.	3 9	"	0 4	"	0 2
10	1 p.m.	S. L.	9 a.m.	2 1	1 a.m.	2 7	noon	1 6	6 p.m.	0 6	12 p.m.	0 4
11	12 p.m.	0 10	1 a.m.	1 11	2 p.m.	1 9	1 a.m.	1 5	noon	0 6	noon	0 4
12	"	1 1	"	1 8	1 a.m.	1 6	"	1 0	"	0 5	1 a.m.	0 3
13	6 a.m.	1 3	12 p.m.	1 1	"	1 2	noon	0 9	1 a.m.	0 5	noon	S. L.
14	1 a.m.	0 10	9 a.m.	1 2	noon	0 10	6 p.m.	0 10	noon	0 2	"	above 0 1
15	noon	0 10	6 a.m.	0 10	"	0 9	1 a.m.	0 10	"	0 2	"	0 1
16	1 a.m.	0 9	noon	0 9	"	0 11	6 a.m.	0 5	"	0 1	"	0 1
17	noon	0 7	12 p.m.	1 1	"	0 11	noon	0 6	"	0 1	1 a.m.	0 1
18	12 p.m.	0 10	6 a.m.	1 3	6 a.m.	1 0	12 p.m.	0 10	"	0 1	noon	below 0 2
19	"	1 4	noon	1 0	noon	0 9	noon	0 10	"	0 2	"	0 1
20	5 p.m.	3 2	"	1 3	1 a.m.	0 9	1 a.m.	0 10	"	S. L.	"	0 1
21	1 a.m.	2 11	6 a.m.	1 3	noon	0 6	"	below S. L. 2	"	below S. L. 2	"	S. L.
22	"	2 0	12 p.m.	1 4	"	0 6	noon	0 6	"	0 2	6 p.m.	above 0 5
23	1 p.m.	1 11	9 a.m.	1 4	"	0 6	"	0 5	"	0 2	1 a.m.	0 5
24	1 a.m.	1 9	"	1 3	"	0 6	"	0 5	"	0 1	"	0 3
25	12 p.m.	1 9	5 p.m.	2 9	6 a.m.	0 6	"	S. L.	"	S. L.	"	S. L.
26	3 p.m.	2 3	7 p.m.	2 6	noon	0 4	"	S. L.	"	S. L.	6 a.m.	0 4
27	12 p.m.	6 2	10 p.m.	2 3	"	0 4	"	S. L.	"	S. L.	noon	0 3
28	3 a. m.	6 5	1 a.m.	1 3	"	0 4	"	S. L.	"	S. L.	"	0 2
29	1 a.m.	3 3	"	2 2	12 p.m.	0 5	12 p.m.	0 8	"	S. L.	"	0 1
30	"	1 1	"	2 9	"	2 6	2 p.m.	1	"	S. L.	"	S. L.
31	"	1 2	"	2 9	2 p.m.	5 9	2 p.m.	5	1 a.m.	S. L.	"	S. L.

RIVER HEIGHT RECORDS.—Continued.

Date	JULY.		AUGUST.		SEPTEMBER.		OCTOBER.		NOVEMBER.		DECEMBER.	
	Time.	Above or below S.L.	Time.	Above or below S.L.	Time.	Above or below S.L.	Time.	Above or below S.L.	Time.	Above or below S.L.	Time.	Above or below S.L.
1	1 a.m.	ft. in. S.L.	1 a.m.	ft. in. S.L.	2 p.m.	ft. in. S.L.	noon	ft. in. S.L.	1 a.m.	ft. in. S.L.	noon	ft. in. S.L.
2	"	below 0	noon	0	1 a.m.	below 0	"	0	noon	0	"	0
3	noon	0	9 a.m.	0	noon	0	12 p.m.	0	"	0	1 a.m.	0
4	"	S.L.	noon	S.L.	"	0	"	0	"	S. L.	noon	0
5	"	S.L.	"	below 0	"	0	6 p.m.	0	"	below 0	"	0
6	"	S.L.	"	0	"	0	1 a.m.	0	noon	0	1 a.m.	0
7	"	S.L.	"	0	"	0	"	0	"	0	12 p.m.	0
8	1 a.m.	S.L.	"	0	1 a.m.	0	noon	0	"	0	"	5
9	noon	0	1 a.m.	0	noon	0	"	0	"	0	5 a.m.	6
10	"	0	"	above 0	"	0	1 a.m.	0	1 a.m.	0	1 a.m.	3
11	"	0	"	0	1 a.m.	0	"	0	12 p.m.	0	6 p.m.	1
12	"	0	noon	S.L.	12 p.m.	0	"	S.L.	"	3	1 a.m.	1
13	"	0	"	S.L.	1 a.m.	0	"	S.L.	"	6	12 p.m.	2
14	"	0	"	S.L.	12 p.m.	1	"	S.L.	"	9	"	4
15	"	0	12 p.m.	0	1 a.m.	0	noon	0	noon	10	2 a.m.	4
16	"	0	"	0	noon	0	1 a.m.	0	1 a.m.	9	1 a.m.	2
17	"	0	"	0	1 a.m.	0	"	0	"	4	4 p.m.	1
18	"	0	"	S.L.	11 p.m.	0	12 p.m.	0	12 p.m.	1	10 p.m.	2
19	"	0	noon	S.L.	noon	0	8 p.m.	1	"	5	1 a.m.	2
20	"	0	"	below 0	noon	0	12 p.m.	below 2	9 p.m.	6	"	1
21	"	0	"	0	"	0	"	3	10 p.m.	6	noon	0
22	"	0	"	0	1 a.m.	0	3 p.m.	3	1 a.m.	6	"	0
23	"	0	"	0	noon	above 0	1 a.m.	2	"	3	1 a.m.	0
24	"	0	"	0	"	0	12 p.m.	0	"	1	"	0
25	"	0	"	0	12 p.m.	0	5 p.m.	0	"	0	11 a.m.	2
26	1 a.m.	0	"	0	11 a.m.	0	1 a.m.	0	12 p.m.	0	1 a.m.	2
27	12 p.m.	0	"	0	1 a.m.	0	"	0	noon	0	6 p.m.	1
28	1 a.m.	0	"	0	"	0	"	above 0	"	0	1 a.m.	1
29	2 p.m.	above 1	6 a.m.	above 0	noon	S.L.	9 a.m.	0	"	0	12 p.m.	3
30	4 p.m.	3	1 a.m.	0	6 p.m.	0	1 a.m.	0	"	0	"	6
31	1 a.m.	2	noon	S.L.	noon	0	"	0	"	0	"	9
	"	1	12 p.m.	0	"	3	4 p.m.	0	"	9	"	11

HOUSE FLOODS FROM RETURNS TO THE CITY SURVEYOR.
COMPARATIVE TABLE, 1901.

Date.	Nidd at Pateley Bridge.		Ure at Middleham Bridge.		Swale at Richmond.	
	Hour.	Height	Hour.	Height	Hour.	Height
		ft. in.		ft. in.		ft. in.
Jan. 27					7-30 a.m.	3 6
Feb. 25			10 a.m.	3 0		
Mar. 5			1 p.m.	10 0	10-30 a.m.	4 6
" 6			2 p.m.	4 0		
" 30			4 p.m.	3 0		
April 3			1 p.m.	7 0	10 a.m.	3 0
" 8			7 a.m.	5 0		
July 28			4 p.m.	3 10		
Aug. 8			11 a.m.	2 0		
Oct. 4			10 a.m.	2 1		
Nov. 12			4 p.m.	10 0	2-30 p.m.	4 0
" 13			7 a.m.	9 10	5 a.m.	6 0
" 18			1 p.m.	3 2		
" 19			4-30 p.m.	6 0		
" 20			7 a.m.	9 0	7-50 a.m.	3 0
" 21			"	6 0		
" 22			"	3 0		
Dec. 8			9 a.m.	8 6	8 a.m.	4 0
" 24			4 p.m.	3 0		
" 29			"	4 0		
" 30	9 p.m.	6 0	4 p.m.	7 0	6-30 p.m.	5 0
" 31	10 a.m.	4 0	7 a.m.	8 0	7-30 a.m.	4 0

YORK—THE MUSEUM.

1900.	Highest Barometer.	Lowest Barometer.
January	30·586 23rd, 9 a.m.	29·130 27th, 9 p.m.
February	30·623 15th, 9 a.m.	29·224 27th, 9 a.m.
March	30·523 23rd, 9 a.m.	28·963 30th, 9 p.m.
April	30·226 17th, 9 p.m.	29·304 15th, 9 a.m.
May	30·531 23rd, 9 p.m.	29·197 7th, 9 a.m.
June	30·436 25th, 9 p.m.	29·419 13th, 9 a.m.
July	30·294 7th, 9 a.m.	29·625 24th, 9 a.m.
August	30·511 20th, 9 a.m.	29·304 26th, 9 a.m.
September	30·229 2nd, 9 a.m.	29·365 20th, 9 a.m.
October	30·510 31st, 9 p.m.	29·165 6th, 9 a.m.
November	30·643 24th, 9 a.m.	29·015 12th, 9 p.m.
December	30·397 4th 9 a.m.	28·689 25th, 9 a.m.
Year	30·643 Nov. 24th, 9 a.m.	28·689 Dec. 25th, 9 a.m.

YORK (BOOTHAM)—SUNSHINE VALUES.

1901.	Total Hours.	Percentages.	
	1901.	1901.	1900.
January	...	...	15
February	...	...	17
March	...	...	18
April	...	...	...
May	208·3	42	? 21
June	196·0	39	28
July	230·1	46	...
August	194·8	43	...
September	99·1	27	...
October	76 1	24	...
November	? 54·6	? 22	...
December	37·0	17	...
Year	...	...	...

THE TREASURER IN ACCOUNT WITH THE YORKSHIRE

Previous Year.	Dr.	INCOME.						£	s.	d.	£	s.	d.	
	<i>Subscriptions :</i>													
	Town Members	...	...	...	...	...	...	640	0	0			
	Country Members	...	...	...	...	...	...	13	0	0			
	Lady Subscribers	...	...	...	...	...	...	66	10	0			
	Associates	...	...	...	...	...	...	8	0	0			
	Arrears received	...	...	...	...	...	...	22	5	0			
	Keys of Gates	...	...	...	...	...	...	66	16	0			
834												816	11	0
	<i>Donation :</i>													
2	York University Extension Society					2	2	0
	<i>Rents :</i>													
	Major Allenby, St. Mary's Lodge	...	...	...	...	...	...	65	0	0			
	Mr. Hill, Marygate Baths	...	...	...	...	...	...	40	0	0			
	York Amateur Rowing Club	...	...	...	...	...	...	5	0	0			
	York and District Field Naturalist's Society, less	£2												
	paid to Attendant...	...	...	...	...	...	...	1	0	0			
	York Waterworks Co., for Shed	...	...	...	...	...	...	5	0	0			
	Do. for Light	...	...	...	...	...	...	0	1	0			
	Corporation of York	...	...	...	...	...	...	2	0	0			
	Yorkshire School for the Blind	...	...	...	...	...	...	0	1	0			
120	National Telephone Co. (2 years)	...	..	...	...	...	...	2	0	0			
												120	2	0
	Hire of Tent and Tables	...	...	...	...	...	...	25	10	9			
Nil.	Less: Expenses of carriage, fixing, repairs, and like	...					...	4	6	10			
												21	3	11
	Whitsuntide Admission Fees	...	...	...	...	...	...	13	11	9			
	Less: Attendants, Police, and Fencing	...	...	...	...	...	...	5	8	6			
9												8	3	3
	<i>Meteorological Department :</i>													
	Grant from Corporation of York					10	0	0
7	Sale of Catalogues					6	6	0
2	Sale of Photographs					2	9	6
	Sale of Cabinet					0	15	0
5	Bank Interest					8	5	6
212	Gate Money					226	5	6
26	Interest on £918 8s. 9d. India 3 % Stock, less Income Tax											26	1	4
1353														
												1248	5	0
	Excess of Expenditure over Income...					49	2	9

£1297 7 9

365	Balance in hands of the Treasurer, 31st December, 1901	316	8	7
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£316 8 7

Examined and found correct,

PHILIP NEWMAN.

EDWIN GRAY, *Honorary Treasurer.*

PHILOSOPHICAL SOCIETY FOR YEAR ENDING 31ST DEC., 1901.

Previous Year.	EXPENDITURE.						Cr.		
						£ s. d.	£ s. d.	£ s. d.	
1	Crown Rent ... ..	...	...	...	...	...		1 0 0
19	Corporation Rent ... ..	...	...	...	...	...		19 11 3
	<i>Rates and Taxes:</i>								
	Property Tax and City Rates ... ..	...	...	...	...	...	39 14 10	
	Waterworks Company's Rates ... ..	...	...	...	...	...	5 14 8	
	Gardener's Licenses ... ..	...	...	...	...	...	2 5 0	
	Receipt and Cheque Books Stamping... ..	...	...	...	...	...	1 13 2	
37								49 7 8	
7	Insurance ... ..	...	...	...	...	...		7 5 0
	<i>Salaries and Wages:</i>								
	Mr. Platnauer ... ..	...	...	...	...	...	150 0 0	
	Mr. Fielden ... ..	...	...	...	...	...	60 0 0	
	Miss Baines ... ..	...	...	...	...	...	41 12 0	
	Mr. Guy ... ..	...	...	...	...	...	30 0 0	
	<i>Attendants at Museum and Hospitium, viz.:</i>								
	Attendant at Museum ... ..	...	...	...	...	72 16 0		
	Female Attendant at Museum... ..	...	...	...	...	31 16 0		
	Female Attendant at Hospitium ... ..	...	...	...	...	32 10 0		
	Gardeners, including temporary labour and extra duty at gates ... ..	...	...	...	...	117 14 0		
							254 16 0		
523								536 8 0	
197	*Yorkshire Insurance Company, Annuity ... ..	...	...	...	...	...		196 16 7
	<i>General Repairs and Expenses:</i>								
	Museum and Hospitium — Small Additions and Expenses ... ..	...	...	...	...	20 13 7		
	Plumbers, Smiths, and like work ... ..	...	...	...	...	9 14 3		
	Joiners', Cabinet Makers', & Builders' Work ... ..	...	...	...	...	6 11 3		
	Painters' and Decorators' Work ... ..	...	...	...	...	13 9 0		
38							50 8 1		
12	<i>Estate:</i> General Repairs ... ..	...	...	...	...	...	14 7 0	
	<i>Gardens:</i>								
27	General Additions, Repairs, and Expenses ... ..	...	...	...	...	...	17 10 11	
Fount. 28								82 6 0	
3	Music in Gardens ... ..	...	...	...	...	...		11 10 4
7	Library, Books and Binding ... ..	...	...	...	...	...		28 19 1
43	Lectures ... ..	...	...	...	...	...		50 6 5
6	Printing and Stationery ... ..	...	...	...	...	...		5 4 3
16	Printing Reports and Postage thereof ... ..	...	...	...	...	...		24 14 3
8	Printing Communications to Members, and Postage of same ... ..	...	...	...	...	...		11 4 9
	Teas at Monthly Meetings ... ..	...	...	...	...	...		12 8 11
	<i>Gas, Coal, and Coke:</i>								
	Museum ... ..	...	...	...	...	...	28 18 11	
	Gardens ... ..	...	...	...	...	...	18 4 10	
	Estate ... ..	...	...	...	...	...	21 6 10	
61								68 10 7	
26	Ornithological Department ... ..	...	...	...	...	...		38 3 8
	<i>Antiquarian Department:</i>								
9	Purchases, carriage and like ... ..	...	...	...	...	...	33 8 3	
	Excavations of Abbey Foundations ... ..	...	...	...	...	...	75 17 3	
								109 5 6	
17	Meteorological Department ... ..	...	...	...	...	...		21 0 6
	Catalogues ... ..	...	...	...	...	...		11 13 4
1	Preparing Photographs for Sale ... ..	...	...	...	...	...		1 7 8
7	Sundry Postages ... ..	...	...	...	...	...		8 3 4
1	Sundries, including Carriage of Parcels ... ..	...	...	...	...	...		2 0 8
1132								£1297 7 9	
	Balance in hands of the Treasurer, 31st December, 1900 ... ..	...	...	...	...	...		365 11 4
	Excess of Expenditure over Income, 1901 ... ..	...	...	...	...	...		49 2 9
								£316 8 7	

*Annuity of £201 8s. 0d. payable until October, 1914, inclusive, created to repay an advance of £3500 made by the Yorkshire Insurance Co.

Principal repaid ... ..	...	...	1554	1	2
„ outstanding ... ..	...	...	1945	18	10
			£3500	0	0

NEW MEMBERS, 1901.

- Anderson, Chas., 44, *Queen Anne's Road*.
 Bagenal, P. H., *The Elms, Hull Road*.
 Barker, J. W., 6, *Queen Anne's Road*.
 Barstow, H. C., *Hazelbush*.
 Brook, Stanley, *Ladbroke House, Scarcroft Road*.
 Calthorp, Gordon, M.D., *St. Saviourgate*.
 Close, Major C. F., *Club Chambers*.
 Craven, Joseph, *Heworth Croft*.
 Davies, S. H., M.Sc., F.G.S., 5, *Vyner Terrace*.
 Fairweather, Walter, *Davygate*.
 Gibbs, John E., 76, *Heslington Road*.
 Gray, Thos., 42, *Queen Anne's Road*.
 Hill, Mrs., *Eastbourne House, Huntington Road*.
 Jackson, J. A., *Garton Lea, Nunthorpe Avenue*.
 Kitching, T. R., *Heworth*.
 Lawson, Richard, *Ousecliffe*.
 Meyer, Philip R., 13, *Grosvenor Terrace*.
 Morrow, Mrs. A. D., *The Cave, Fulford*.
 Newman, Philip L., *St. Paul's Square*.
 Pearson, Paul, *Marygate*.
 Sayner, F. Tilney, *Dalen House, Burton Lane*.
 Smith, H. Lane, *Lendal*.
 Solloway, Rev. J., *Holy Trinity Rectory, Micklegate*.
 Swales, John T., 19, *Goodramgate*.
 Sykes, George, 17, *Bootham Crescent*.
 Thorp, Mrs., *St. James' Terrace*.
 Vaughan, F. H., *Parliament Street*.
 Volans, W. G. B., 4, *Duncombe Place*.
 Webster, Geo., 5, *Portland Street*.
 Whittaker, W. G., *Castlegate*.
 Wilcock, J. W. B., *Acomb Road*.
 Wiseman, O. E., 49, *St Olave's Road*.
 Worsdell, Ronald, 63, *Micklegate*.
 Wyatt, Sydney L., *Club Chambers*.

NEW LADY SUBSCRIBERS.

Brown, Mrs., *River View, Marygate.*
 Clack, Miss Edith J., 47, *Marygate.*
 Cross, Miss, *Burton Lane.*
 Dickinson, Miss, *Burton House, Clifton.*
 Ewbank, Miss Elizth., 7, *Hull Road Terrace.*
 Heslegrave, Mrs., *The Dispensary.*
 Hewitt, Mrs., 43, *Gillygate.*
 Holmes, Miss Sarah, 2, *Newton Terrace.*
 Hopkinson, Miss, 14, *St. Mary's.*
 Kinneavey, Mrs. F. D., 2, *Hetherton Street.*
 Kock, Mrs., 14, *Penley's Grove Street.*
 Munby, Mrs., *Old Rectory House.*
 Ridgway, Mrs., *St Peter's Grove.*
 Sampson, Miss, 36, *Holgate Crescent.*

NEW ASSOCIATES.

Bruff, Harold, 59, *Holgate Hill.*
 Haines, Dr. Wheeler, *North Riding Asylum.*
 Linn, John, 51, *Scarcroft Hill.*
 Place, Tom, 8, *Marlbro' Grove.*



DONATIONS TO MUSEUM AND LIBRARY.

LIBRARY.

BOOKS PRESENTED.

- | | | |
|--|---|-------------------------------------|
| The Quarterly Journal of the Geological Society of London, Vol. lvii., 1901. | } | The Society. |
| The Report of the British Association for the Advancement of Science, Bradford, 1900. | } | The Association. |
| Transactions of the Zoological Society of London, Vol. xv., Parts 6, 7; Vol. xvi., Parts 1 & 3, and Proceedings, Part 4, 1900, and Vol. ii., Part 1. | } | The Society. |
| Reports of the United States Geological Survey, 20th Report, Parts 2, 3, 4, 5, 7; 21st Report, 1 & 6, & 6 continued. Maps and Preliminary Report on the Cape Home Gold Region of Alaska. | } | The Survey. |
| Hand-List of Birds, Vol. ii.; The Jurassic Flora of Yorkshire, Part 1; Catalogue of Welwitschs' African Plants, Vol. ii., Parts 2, 4. | } | The Trustees of the British Museum. |
| 17th Annual Report, Parts 1 & 2, and 18th Report, Part 1, of the Bureau of American Ethnology, and Annual Reports of the Smithsonian Institution for 1898 and 1899. | } | The Institution. |

- Memoirs of the Geological Survey of India, "Palæontologia Indica," Series 9, Vol. iii., Part 1.; New Series, Vol. i., Part 3; Memoirs, Vol. xxx., Parts 2, 3, 4; Vol. xxxi., Parts 1, 2, 3; Vol. xxxii., Parts 1, 2; Vol. xxxiii., Parts 1, 2; Vol. xxxiv., Part 1, and General Report, 1900-1. } The Indian Survey.
- Memoirs and Proceedings of the Manchester Literary and Philosophical Society, xlv., Parts 1, 2, 3, 4, Vol. xlvi., Part 1. } The Society.
- The Journal of the Chemical Society of London, July, 1898, Sept., Oct., Nov., Dec., and Supplementary No., 1899; Proceedings, Nos. 213—216. } The Society.
- The Journal of the Manchester Geographical Society, Vol. xvi., Nos. 7 to 12; Vol. xvii., Nos. 1 to 6, and Supplement, Vol. xiv., Nos. 9 to 12. } The Society.
- Memoirs of the Russian Geological Society, Vol. xiii., No. 3; Vol. xviii., Nos. 1 & 2; Bulletins, Vol. xix., Nos. 1 to 10; Vol. xx., Nos. 1 to 6. } The Society.
- Proceedings of the Imperial Mineralogical Society of Russia, for 1900 and 1901. } The Society.
- Memoirs of the Naturalists' Society of Kiew, Vol. xvi., No. 2. } The Society.
- The Proceedings of the Geologists' Association, Vol. xvii., Parts 4 & 5. } The Association.
- An Account of the Crustacea of Norway, Vol. iv., Parts 1 & 2, by Prof. G. O. Sars. } The Author.
- Bulletin of the American Geographical Society, Vol. xxxii., No. 5; Vol. xxxiii., Nos. 1 to 4. } The Society.

- Transactions of the Leicester Literary
and Philosophical Society, Vol v.,
Parts 10 to 12. } The Society.
- Transactions of the Edinburgh Geo-
logical Society, Vol. viii., Part 1. } The Society.
- Transactions of the Burton-on-Trent
Natural History and Archæological
Society, Vol. iv., Part 2. } The Society.
- Proceedings of the Bath Antiquarian
Field Club and Natural History
Society, Vol. ix., No. 4. } The Society.
- Memoirs of the New York Academy of
Sciences, Vol. ii., Parts 2 & 3, and
Annals, Vol. xiii., Parts 1, 2, 3. } The Academy.
- 12th Report of the Missouri Botanic
Garden. } The Council.
- Photographs of Stars, Star Clusters,
& Nebulæ, Vol. ii., by Isaac Roberts,
D.Sc., F.R.S. } The Author.
- Geological Survey of Canada; Catalogue
of the Marine Invertebrata of Eastern
Canada, by J. F. Whiteaves, LL.D. } The Survey.
- Donovan's British Insects, Vol. i. to x.
British Shells, Vols. i. to v.; British
Birds, Vols. iv. & v., and British
Fishes, Vol. i. } Mr. J. Melrose.
- Geological Survey of New South Wales;
The Mineral Resources, by E. F.
Pittman; The Iron Ore Deposits, by
J. B. Jaquet; and Report of the
Australian Museum. } New South Wales
Survey.
- Riallaro, the Archipelago of Exiles, by
Godfrey Sweven. } The Author.
- The Roman Stones in the Hunterian
Museum, by James Macdonald, M.A.,
LL.D. } University
of Glasgow.

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| Transactions of the Wisconsin Academy
of Sciences, Arts, & Letters, Vol. xii.,
Part 2; Vol. xiii., Part 1. | } | The Academy. |
| Mitteilungen des Vereins für Erdkunde
zu Leipzig, for 1900, and Atlas. | } | The Society. |
| 30th Annual Report of the Board of
Trustees of the Ohio State University,
1900, Parts 1 & 2. | } | The Trustees. |
| Bulletin of the Geological Institute of
Mexico, No. 14, 1900. | } | The Institute. |
| Bulletin of the University of Kansas,
Vol. ix., Nos. 3 & 4; Vol. x., No. 1,
and Vol. xi., No. 6. | } | The University. |
| Transactions of the 32nd and 33rd
Annual Meetings of the Kansas
Academy of Science, Vol. xvii. | } | The Academy. |
| Transactions of the Academy of Science
of St. Louis, Vol. x., Nos. 9, 10, 11;
Vol. xi., Nos. 1 to 5. | } | The Academy. |
| Verhandlungen der Naturforschenden
Gesellschaft in Basel, Vol. xiii. & xiv. | } | The Society. |
| The Proceedings and Transactions of
the Nova Scotian Institute of Science,
Vol. x., Part 2. | } | The Institute. |
| Transactions and Proceedings of the
Perthshire Society of Natural Science,
Vol. iii., Part 3. | } | The Society. |
| Proceedings of the Rochester Academy
of Science, Vol. iv. | } | The Academy. |
| Bulletin of the Geological Institution
of the University of Upsala, Vol. v.,
Part 1, No. 9. | } | The Institution. |
| Bergen Museums Aarbog, for 1901. | | The Council. |
| 49th Annual Report & Transactions of
the Nottingham Naturalists' Society,
1900-1. | } | The Society. |

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|---|---|-----------------------------|
| 10th Annual Directory of the Scientific Alliance of New York, 1901. | } | The Committee. |
| Proceedings of the Bristol Naturalists' Society, Vol. ix., Part 2, 1899. | } | The Society. |
| Report and Proceedings of the Belfast Natural History and Philosophical Society, 1899-00. | } | The Society. |
| Bulletin of the Lloyd Library, No. 2, 1901. | } | The Librarian. |
| University of Toronto Studies, 3 Parts. | | The University. |
| Annals of the Queensland Museum, No. 5. | } | The Council. |
| Manchester Museum Handbooks; Correlation Tables of British Strata, by B. Hobson, M.Sc. | } | The Council. |
| Meeresfauna von Bergen, by Dr. A. Appellöf. | } | Bergen Museum. |
| Annals of the National Museum of Montevideo, Vol. ii., No. 17; Vol. iii., No. 21. | } | The Council. |
| Meteorological Observations at Stations of the 2nd Order, for 1897 & 98; Charts illustrating the weather of the North Atlantic Ocean in the winter of 1898 and 1899, and weekly Weather Reports for 1891. | } | The Meteorological Society. |
| Bulletin of the National Astronomical Observatory of Tacubaya, Vol. ii., No. 6. | } | The Council. |
| 67th Annual Report of the Bootham School Natural History Society. | } | The Society. |
| Publications of the West Hendon House Observatory, Sunderland, by T. W. Backhouse, F.R.A.S. | } | Mr. J. Backhouse,
F.Z.S. |

GEOLOGICAL DEPARTMENT.

A series of Fossils from the Muschellkalk of Germany, and Oolitic Rock specimens.	} Dr. Engel.
A small series of Limestone Fossils from the Island of Gothland.	} Mr. E. Stanhope.
Ten specimen Tubes of Desert and other Sand.	} Mr. M. B. Cotsworth.
A small series of Fossils.	Mr. W. B. Giles.
Rock specimens of Trias formation from the Railway Cutting near Selby.	} Mr. H. Richardson.

ANTIQUITIES.

A Roman Stone Coffin and Contents found in Sycamore Terrace.	} Mr. E. Taylor.
A Norman Column from the Hospital of St. Peter, under the Theatre.	} Messrs. Parker & Sharp.
A series of Weapons from S. America.	Mr. Frank Green.
Ornamented Spindle Whorl, dug up in Coney Street, & specimens of Native work from the West Indies.	} Mr. Frank Rowntree.
A Roman Tazzia.	Mrs. Williamson.
Two rude Stone Axes.	Mr. S. Brown.

ZOOLOGY & COMPARATIVE ANATOMY.

A Sparrow Hawk from near York.	Mr. Lazenby.
A Female Shag.	Mr. J. Backhouse.
A Pike mounted in case, caught at Hornsea Mere, Feb. 1898, weight 18 $\frac{1}{4}$ lbs.	} Mr. Schroeder.
A series of Shells from Palestine.	Mr. M. B. Cotsworth.
A series of Shells from the West Indies.	Mr. Frank Rowntree.

MINERALOGY.

A small series of Minerals from Palestine	Mr. M. B. Cotsworth.
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BOTANY.

Specimens of British Rubi, from V.C. }
 12, N. Hants, collected in 1900. } Rev. W. L. W. Eyre.

Rubus affinis, var. briggsianus. Rogers.
 „ Lejeunei, var. ericetorum. Lefv.
 „ rudis. Wh. & N.
 „ leucandrus. Focke.
 „ thyrsoideus. Wimm.
 „ Bloxamii. Lees.
 „ acutifrons. A. Ley.
 „ pallidus. Wh. & N.
 „ pubescens, var. subinermis. Rogers.
 „ Koehleri. Wh. & N.
 „ Marshalli. Focke & Rogers.
 „ ochrodermis. A. Ley.

Specimens of *Lilium pyrenaicum*, Gouan, }
 from South Molton, Devonshire. } Mr. F. H. Weekes.

Specimens of *Teucrium Scordium*, Linn, }
 from near Ely, Cambridgeshire. } Mr. Arthur Bennett.

Specimens of Polished Wood from }
 Ceylon. } Mrs. S. Stanhope.



PRELIMINARY CATALOGUE
OF THE
BRITISH BIRD COLLECTIONS
IN THE POSSESSION OF THE
YORKSHIRE PHILOSOPHICAL SOCIETY,
BY THE
HON. CURATOR, JAMES BACKHOUSE, F.L.S., M.B.O.U., F.Z.S., &c.

PART III.

Order, PASSERES. Sub-Order, OSCINES.
Section, Oscines Dentirostres.
Family, Motacillidæ. Genus, Motacilla.

SPECIMENS MOUNTED OR SKINS.	SKELETONS.	EGGS.	CASE No.
Order ACCIPITRES.			
Sub-Order STRIGES.			
Family STRIGIDÆ.			
Genus Strix.			
Strix flammea, Linn. Barn Owl.			
1 & 2. Heworth, York ?	Allis Coll. Sclerotic bones.	Clutch of 3, Uppingham	cxliv.
Family BUBONIDÆ.			
Genus Asio.			
Asio otus, (Linn.) Long-eared Owl.			
1 & 2. Pair of adults, Flaxton, York, Jan. 1890. Purchased.			
Skin from Aberford, 1880, Bree Coll.	Allis Coll.	2 clutches of 4, Scoreby	cxlv

SPECIMENS MOUNTED OR SKINS.	SKELETONS.	EGGS.	CASE No.
Asio accipitrinus, (Pall.)			
<i>Short-eared Owl.</i>			
1 & 2. Males, Easington, Holderness, Autumn 1895. Purchased.	Allis Coll.	Clutch of 6, Sarepta	CXLVI
Skin of adult, Colchester, Oct. 1878, Bree Coll.			
Skin of dark variety, Easington, Oct. 1900 (Loten).			
Skin of specimen, without data.			
Specimen from Dabrudscha (pale), Bree " " " Coll.			
Genus Syrnium.			
Syrnium aluco, (Linn.)			
<i>Tawny Owl.</i>			
1. Adult, Scarbro', Winter 1889. Purchased.	Allis Coll.	Clutch of 4, Raincliffe Wood	cxlvii
2. Immature } 3. Adult } Locality unknown.	Sclerotic bones.		
Skin of adult. " "			
Genus Nyctea.			
Nyctea scandiaca, (Linn.)			
<i>Snowy Owl.</i>			
1 & 2. Adults, Rudston Coll, no data.	...	1 without data	cxlviii
Skin of adult,			
Genus Surnia.			
Surnia ulula, (Linn.)			
<i>Hawk Owl.</i>			
Skins of 3 adults, Lapland.			
Genus Nyctala.			
Nyctala tengmalmi, (Gmel.)			
<i>Tengmalm's Owl.</i>			
Skin of adult, Continental, 1877, Bree Coll.			
Genus Scops.			
Scops giu, (Scop.)			
<i>Scops Owl.</i>			
1. Local.	Allis Coll.	2 eggs, Griqualand	cxl
2. Boynton, Yorks., July 1832. Both from Strickland Coll.	Sclerotic bones.		

SPECIMENS MOUNTED OR SKINS.	SKELETONS.	EGGS.	CASE No.
Genus Bubo.			
Bubo ignavus, Forst.			
Eagle Owl.			
1. Strickland Coll.	Allis Coll.	1 egg	CLII
2. Rudston Coll.			
Genus Athene.			
Athene noctua, (Retz.)			
Little Owl.			
Sub-Order ACCIPITRES.			
Family VULTURIDÆ.			
Genus Gyps.			
Gyps fulvus, (Gmel.)			
Griffon Vulture.			
Genus Vultur.			
Vultur monachus, Linn.			
Cinereous Vulture.			
Genus Neophron.			
Neophron percnopterus (Linn.)			
Egyptian Vulture.			
Family FALCONIDÆ.			
Genus Circus.			
Circus æruginosus, (Linn.)			
Marsh Harrier.			
1. Cambridgeshire.	...	Clutch of 4, Pomerania	clvii
2 to 4. Strickland Coll. Probably from Yorkshire.			
Circus cineraceus, (Mont.)			
Montagus Harrier.			
Circus cyaneus, (Linn.)			
Hen Harrier.			
1 & 2. Females, Pocklington about 1878. Bought of Allan.	...	Clutch of 5, Pomerania	clix
Skin of female, Bree Coll.			

SPECIMENS MOUNTED OR SKINS.	SKELETONS.	EGGS.	CASE No.
Circus swainsoni, Smith. <i>Pallid Harrier.</i>			
Genus Butes.			
Buteo vulgaris, Leach. <i>Common Buzzard.</i>	...	2 odd eggs Clutch of 3, Thuringia	CLXI
1. Bought of Allan.			
2. Strickland Coll.			
3. Kiplingcotes (Riley).			
Skin of adult, without data, Bree Coll.			
Skins of 2 young in down, Sweden, Bree Coll.			
Buteo lagopus, Gmel. <i>Rough-legged Buzzard.</i>			
1 & 2. Adults, British-killed birds, Strickland Coll.	...	Clutch of 2, Lapland	clxii
Skin of adult (very pale), without data. Bree Coll.			
Genus Aquila.			
Aquila chrysaetus, (Linn.) <i>Golden Eagle.</i>	Sclerotic bones.	1 egg, Torma, Lapland	
Genus Haliaetus.			
Haliaetus albicilla, (Linn.) <i>Sea Eagle.</i>			
1. Adult, Rudston Coll. Locality pro- bably Yorkshire.	Sclerotic bones.	Clutch of 2 eggs, Sarepta	clxiv
Genus Astur.			
Astur palumbarius, (Linn.) <i>Goshawk.</i>			
Skin of immature bird, Denmark, Bree Coll.	...	Clutch of 3 ,, 2, Denmark	
Genus Accipiter.			
Accipiter nisus, (Linn.) <i>Sparrow Hawk.</i>			
Skin of female, Beeschurch, Nov. 1876, Bree Coll.	...	6 local clutches 1 clutch of 4, Brandenburg	
Skin of male, Beeschurch, Nov. 1876, Bree Coll.			

SPECIMENS MOUNTED OR SKINS.	SKELETONS.	EGGS.	CASE No.
Accipiter nisus — <i>Continued</i> .			
Skins of 2 young in down, Sweden, July 1875, Bree Coll.			
Skin of young female, Church Fenton, Nov. 1884.			
Skin of adult female, Askrigg Moor, August 1900			
Skin of female, Easington, Yorks., Nov. 1901 (Loten).			
Genus Milus.			
Milvus iclinus , Savigny. <i>Common Kite.</i>	...	Clutch of 3, Pomerania 2 odd eggs	
Milvus migrans , (Bodd.) <i>Black Kite.</i>	...	Clutch of 4, South Russia	
Genus Pernis.			
Pernis apivorus , (Linn.) <i>Honey Buzzard.</i>			
1. Yorkshire. Bought of C. Helstrip.	...	1 egg	clxix
Genus Falco.			
Falco gyrfalco , Linn. <i>Jerfalcon.</i>			
Skin of mature bird, Lapland, 1963, Bree Coll.	...	1 egg	
Skin of immature bird, Denmark, Bree Coll.			
Falco candicans , Gmel. <i>Greenland Falcon.</i>			
1 & 2. Strickland Coll.	clxxi
3. Rudston Coll.			
Falco islandus , Gmel. <i>Iceland Falcon.</i>			
Falco peregrinus , Tunstall. <i>Peregrine Falcon.</i>			
1, 3 & 4. Strickland Coll., locality doubtful.	...	Clutch of 3, Brandenburg ,, 2, ,,	clxxiii
2. Adult male, Bootham Stray, York, Nov. 1879. Presented by Mr. Over- ton, the shooter, to Rudston Coll.		,, 2, Spaëwald ,, 2, Sutherland	

SPECIMENS MOUNTED OR SKINS.	SKELETONS.	EGGS.	CASE No.
Falco subbuteo, Linn. <i>Hobby.</i>			
1 & 2. Said to have been killed near Doncaster. Presented by J. Back- house. Skin of adult female, Danube, Bree Coll. Other skins without data.	...	... ...	CLXXIV
Falco æsalon, Tunstall. <i>Merlin.</i>			
1 & 2. North of England. Presented by J. Backhouse. 3. Adult male, Spurn, 1892. 4. Immature bird, Yorkshire. Skin of female, Easington, Yorks., Oct. 1899.	...	Clutch of 3, Uppingham 6 old eggs	clxxv
Falco vespertinus, Linn. <i>Red-legged Falcon.</i>	...	4 eggs	
Falco tinnunculus, Linn. <i>Kestrel.</i>			
1 & 3. Adult male & female, Heworth, 1900 2 & 4 to 7. Young in down, Riccall, June 1900. Purchased. Skin of female, Romney Marsh, Sept. 1882, Bree Coll. Skin of young male, Kilnsea, Yorks., Oct. 1899.	Sclerotic bones.	Several local clutches	clxxvii
Falco cenchris, Naum. <i>Lesser Kestrel.</i>			
1. Wilstrop, Yorks., Nov. 1867. Pre- sented by the late Mr. John Harrison.	...	Clutch of 3, Smyrna	clxxviii
Genus Pandion.			
Pandion haliaëtus, (Linn.) <i>Osprey.</i>			
Skin of young in down, Sweden, June 1873, Bree Coll.	...	Clutch of 3, Lapland	
Order STEGANOPODES.			
Family PELECANIDÆ.			
Genus Phalacrocorax.			
Phalacrocorax carbo, (Linn.) <i>Cormorant.</i>			
1. Adult male, near Scarbro', May 1887. Purchased.	...	Clutch of 4, Nettleness	clxxx

SPECIMENS MOUNTED OR SKINS.	SKELETONS.	EGGS.	CASE No.
Phalacrocorax graculus, (Linn.) <i>Shag.</i>			
1. Adult male, Strickland Coll.	...	Clutch of 6, Shetland (Unst)	CLXXXI
2. Adult female, Sutherland, May. Presented by J. Backhouse.			
Genus Sula.			
Sula bassana, (Linn.) <i>Gannet.</i>			
1. Adult, caught at Howsham, Oct. 1891. Purchased.	Sclerotic bones.	3 eggs, Farne Islands	clxxxii
Order HERODII.			
Family ARDEIDÆ.			
Genus Ardea.			
Ardea cinerea, Linn. <i>Common Heron.</i>			
1. Adult, shot at Church Fenton, Feb. 1888. Purchased.	...	2 clutches of 4 each, Moreby, York	clxxxiii
2. Adult, Strickland Coll.			
Ardea purpurea, Linn. <i>Purple Heron.</i>			
1. Adult, Strickland Coll.	...	Clutch of 4, South Russia	clxxxiv
2. Immature bird, Flambro'.			
Skin of immature bird, Copenhagen, Bree Coll.			
Ardea alba, Linn. <i>Great White Egret.</i>			
1. Hornsea, Strickland Coll.	...	Clutch of 4, South Russia	clxxxv
1. Scarborough, near Beverley, 1834, Rudston Coll.	...	... ..	" A
Skin of adult female, Lenkoran, April, Bree Coll.			
Ardea garzetta, Linn. <i>Lesser Egret.</i>			
Skin of adult male, Lenkoran, Bree Coll.	...	Clutch of 5, South Russia	
Ardea bubulcus, Audouin. <i>Buffed-backed Heron.</i>			
	...	Clutch of 3, Lake Halanili	

SPECIMENS MOUNTED OR SKINS.	SKELETONS.	EGGS.	CASE No.
Ardea ralloides, Scop. <i>Squacco Heron.</i>			
1. Rudston Coll.			
2. Pontefract, several years ago, Strickland Coll.	...	Clutch of 4, South Russia	clxxxviii
Genus Ardetta.			
Ardetta minuta, (Linn.) <i>Little Bittern.</i>	...	Clutch of 5, Brandenburg	
Genus Nycticorax.			
Nycticorax griseus, (Linn.) <i>Night Heron.</i>			
Skin of immature bird, S. Russia, Sept. 1875, (Schlüter).	...	Clutch of 4, South Russia	
Genus Botaurus.			
Botaurus stellaris, (Linn.) <i>Bittern.</i>			
1 & 2. Adult male and female, Norfolk Coast, Jan. 1875. Presented by J. Backhouse.	...	Clutch of 3, South Russia	cxci
Family CICONIIDÆ.			
Genus Ciconia.			
Ciconia alba, Bechst. <i>White Stork.</i>	Sclerotic bones.	Clutch of 3, Smyrna	
Ciconia nigra, (Linn.) <i>Black Stork.</i>			
1. Market Weighton, Oct. 1852.	...	1 egg, Denmark	cxcliii
1a. Louth, Lincolnshire, June 1832.	...	... ..	" A
Family PLATALEIDÆ.			
Genus Platalea.			
Platalea leucorodia, Linn. <i>Spoonbill.</i>			
1. Adult male, killed by A. Savage on the Hornby Decoy, Bedale, 1865.			
2. Female, Rudston Coll.			
Skin of young in down, Danube, 1885.	Sclerotic bones.	2 eggs	cxcliv

SPECIMENS MOUNTED OR SKINS.	SKELETONS.	EGGS.	CASE No.
Family IBIDÆ.			
Genus Plegadis.			
Plegadis falcinellus, (Linn.) <i>Glossy Ibis.</i>	...	Clutch of 4, South Hungary	
Family			
PHŒNICOPTERIDÆ.			
Genus Phœnicopterus.			
Phœnicopterus roseus, Pall. <i>Flamingo.</i>			
Skin of adult male, Seville, April 1883, Bree Coll.			
Order ANSERES.			
Family ANATIDÆ.			
Genus Anser.			
Anser cinereus, Meyer. <i>Greylag Goose.</i>	Sclerotic bones.	1 egg	
Anser segetum, (Gmel.) <i>Bean Goose.</i>			
1. Skin of young in down, Dranora, May 1874, Bree Coll.	...	1 egg, Iceland	
Anser brachyrhynchus, Baill. <i>Pink-footed Goose.</i>			
Anser albifrons, (Scop.) <i>White-fronted Goose.</i>			
1. Cottingwith (Sleights).	...	1 egg	CC
Anser erythropus, Linn. <i>Lesser White-fronted Goose.</i>			
Skin of adult female, Sweden, June 1862 (Wheelwright), Bree Coll.			

SPECIMENS MOUNTED OR SKINS.	SKELETONS.	EGGS.	CASE No.
Genus Bernicla.			
Bernicla brenta, (Pall.)			
<i>Brent Goose.</i>			
1. Adult, Yorkshire			
Skin of adult, Colchester, Jan. 1862, Bree Coll.	...	...	ccii
Bernicla leucopsis, (Bechst.)			
<i>Bernacle Goose.</i>			
Genus Cygnus.			
Cygnus olor, (Gmel.)			
<i>Mute Swan.</i>			
Cygnus musicus, Bechst.			
<i>Whooper Swan.</i>			
1. Immature bird, Scarbro', Sept. 1890. Presented by J. Backhouse.	Sclerotic bones.	1 egg	ccv
Cygnus bewicki, Yarr.			
<i>Bewick's Swan.</i>			
1. Adult, Strensall, shot by Col. Hill out of a flock of eleven, Feb. 1879. Presented by Saml. Key, Esq.	...	...	ccvi
Genus Tadorna.			
Tadorna cornuta, (Gmel.)			
<i>Common Sheldrake.</i>			
1. Rudston Coll.	...	3 eggs	ccvii
2 & 4. Strickland Coll.	...	...	„ A
3. Male, Easington, June 1888.			
1 & 2. Adults, from Poulterers, Harro- gate, July 1895. Presented by J. Backhouse.			
Tadorna casarca, (Linn.)			
<i>Ruddy Sheldrake.</i>			
Skin of adult female (nesting), Sweden, July 30, 1870, Bree Coll.	...	1 egg, Iceland	

SPECIMENS MOUNTED OR SKINS.	SKELETONS.	EGGS.	CASE No.
Genus Anas.			
Anas boscas, Linn. <i>Mallard.</i>	...	2 local clutches	
Anas streperus, Linn. <i>Gadwall.</i>	...	3 eggs of doubtful locality	
Anas clypeata, Linn. <i>Shoveller.</i>			
Adult female, near York, Dec. 1896. Purchased.	...	3 eggs of doubtful locality	
Anas crecca, Linn. <i>Teal.</i>	...	Clutch of 4, Strensall	
Anas circia, Linn. <i>Garganey.</i>			
1. Adult, Leadenhall Market. Pre- sented by J. Backhouse.	...	2 eggs	ccxiii
Anas acuta, Linn. <i>Pintail.</i>			
1. Kiplingcotes, Yorks. Purchased. 2 & 3. Rudston Coll.	...	3 eggs	ccxiv
Anas penelope, Linn. <i>Wigeon.</i>			
1 & 2. Adults, Yorks. Purchased. 3. Adult male, Easington, 1901. Skin of adult, Danube, Bree Coll.	...	Clutch of 3, Iceland	ccxv
Genus Fuligula.			
Fuligula ferina, (Linn.) <i>Pochard.</i>			
? Female, Yorkshire, Feb. 1897. Pur- chased.	Sclerotic bones.	Clutch of 4, Iceland	ccxvi
Fuligula rufina, (Pall.) <i>Red-headed Pochard.</i>			
Skin of adult, Asia Minor.	...	Clutch of 2, Salz See	
Fuligula marila, (Linn.) <i>Scaup.</i>			
1. Female, Wensleydale. Presented by Lord Bolton. Skin of male, Colchester, Jan. 1861, Bree Coll.	...	2 odd eggs and clutch of 3, Iceland	ccxviii

SPECIMENS MOUNTED OR SKINS.	SKELETONS.	EGGS.	CASE No.
Fuligula cristata, Leach. <i>Tufted Duck.</i>	...	2 eggs	
Fuligula ferruginea, (Gmel.) <i>White-eyed Duck.</i>	...	1 egg	
Fuligula glancion, (Linn.) <i>Goldeneye.</i>			
1. Adult female, Scotland. Presented by Mr. Elmhirst.	Sclerotic bones.	2 eggs	CCXXI
2. Adult male, Newton-on-Derwent, Feb. 1900. Bought of Allan.			
Skin of female, Essex Coast, 1877, Bree Coll.			
Skins of 2 females, Colchester, 1862, Bree Coll.			
Fuligula histrionica, (Linn.) <i>Harlequin Duck.</i>	...	Clutch of 4, Iceland	
Fuligula glacialis, (Linn.) <i>Long-tailed Duck.</i>			
1. Spurn, young male, May 1888, (Loten).	...	Clutch of 4, Iceland	CCXXIII
2 & 3. Strickland Coll.			
4 & 5. Adult male & female. Bought of Clarke, Scarborough.			
Genus Somateria.			
Somateria mollissima, (Linn.) <i>Eider Duck.</i>	...	Clutch of 4, Iceland	
Somateria spectabilis, (Linn.) <i>King Eider.</i>	...	1 egg	
Somateria stelleri, (Pall.) <i>Stellers Duck.</i>			
Genus Ædemia.			
Ædemia fusca, (Linn.) <i>Velvet Scoter.</i>			
1. Adult, Goole, Jan. 1893. Pur- chased.	...	Clutch of 2, Iceland	CCXXVII
Ædemia nigra, (Linn.) <i>Common Scoter.</i>			
1. Yorkshire. Purchased.	...	Clutch of 3, Iceland	CCXXVIII
Ædemia perspicillata, (Linn.) <i>Surf Scoter.</i>	...	1 egg, Labrador	

SPECIMENS MOUNTED OR SKINS.	SKELETONS.	EGGS.	CASE No.
Genus Mergus.			
Mergus merganser. Linn. <i>Goosander.</i>			
1 & 2. Yorkshire. Skin of adult, Bree Coll.	...	3 eggs, Iceland	CCXXX
Mergus serrator, Linn. <i>Red-breasted Merganser.</i>	...	Clutch of 3, Iceland 2 eggs	
Mergus albellus, Linn. <i>Smew.</i>			
Order COLUMBÆ.			
Family COLUMBIDÆ.			
Genus Columba.			
Columba palumbus, Linn. <i>Ring Dove or Wood Pigeon.</i>			
Skin of adult male, Isle of Wight, Mar. 1867, Bree Coll.	...	2 clutches, Heslington, York	
Skin of adult, Hampshire, 1879, Bree Coll.			
Columba livia, Bonnat. <i>Rock Dove.</i>			
1 & 2. Bridlington, 1895 (Boynton).	...	4 eggs, Castle Howard	CCXXXIV
Columba œnas, Linn. <i>Stock Dove.</i>			
1 & 2. Adults, Wilstrop, April 1890. Presented by J. Harrison.	...	2 clutches, Heslington	CCXXXV
3. Young, Church Fenton (Poulter).			
Genus Turtur.			
Turtur communis, Selby. <i>Turtle Dove.</i>			
1. Church Fenton. Presented by J. Backhouse.	CCXXXVI
2. Female, Kilnsea (Loten), June 1888.			
Turtur orientalis, (Lath.) <i>Eastern Turtle Dove.</i>			
1. Scarbro', see "Naturalist," 1890, p. 258. Presented by J. Backhouse.	CCXXXVII

SPECIMENS MOUNTED OR SKINS.

SKELETONS.

EGGS.

CASE
No.Family **PTEROCLIDÆ.**Genus **Syrrhaptes.****Syrrhaptes paradoxus, (Pall.).***Pallas's Sand Grouse.*

1 & 2. Rudston Coll., Yorkshire, 1863.

1 & 2. Spurn, Yorkshire, 1888.

Breast
bones.

...

...

...

...

...

...

CCXXXVIII

„

A

Order **GALLINÆ.**Family **PHASIANIDÆ.**Genus **Phasianus.****Phasianus colchicus, Linn.***Pheasant.*

1. Abnormal variety, Yorkshire. Purchased.

1. Presented by Capt. Key, Fulford, York.

...

Several local eggs

CCXXXIX

...

...

...

...

...

„

A

Genus **Caccabis.****Caccabis rufa, (Linn.)***Red-legged Partridge.*

1 & 2. Immature bird, Stebbing, Essex, Oct. 1874. Purchased.

1 & 2. Adults, Saffron-Walden.

Skin of immature male, Church Fenton, December 1899. Presented by J. Poulter.

...

3 eggs, Norwich, 1853

CCXI

...

...

...

...

...

„

A

Genus **Perdix.****Perdix cinerea, Lath.***Partridge.*

1. Adult, Thirsk (Lee). Purchased. (White Horse-shoe variety).

Skins of adult male and female, Danube, Bree Coll.

...

2 local clutches

CCXII

Genus **Coturnix.****Coturnix communis, Bonnat.***Quail.*

...

1 clutch

SPECIMENS MOUNTED OR SKINS.	SKELETONS.	EGGS.	CASE No.
Family TETRAONIDÆ.			
Genus Lagopus.			
Lagopus mutus, Leach. <i>Ptarmigan.</i>	...	1 clutch	
Lagopus scoticus, (Lath.) <i>Red Grouse.</i>			
1. Adult female, assuming male plumage, South Tyne Head, Cumberland. Presented by J. Backhouse.	...	Yorkshire clutches	ccxliv
2 & 3. Adults, normal plumage, Strickland Coll.			
Genus Tetrao.			
Tetrao tetrix, Linn. <i>Black Grouse.</i>			
Skin of young in down, Sweden, 1875, Bree Coll.	Sclerotic bones.	3 eggs	ccxlv
Hybrid Grouse.			
1. Female, between Black and Red Grouse, Strickland Coll.	...	... ..	„ A
Tetrao urogallus, Linn. <i>Capercaillie.</i>			
1 & 2. Adult male and female, Scotland, 1889. Purchased.	Sclerotic bones.	3 eggs	ccxlvii
Hybrids. <i>Between T. urogallus & T. tetrix.</i>			
1 & 2. Male and female. Locality? Strickland Coll.	...	... ..	„ A
Order GRALLIÆ.			
Family RALLIDÆ.			
Genus Rallus.			
Rallus aquaticus, Linn. <i>Water Rail.</i>			
1. Male, Spurn, Oct. 1901. Killed against Telegraph Wires.	...	1 clutch of 7, Potter Heigham	ccxlviii
Skin of female, Easington, Yorkshire, Nov. 1900.			
Genus Porzana.			
Porzana maruetta, (Leach.) <i>Spotted Crake.</i>			
1. Adult, Kiplingcotes. Purchased.	...	1 clutch of 9, South Russia	ccxlviii
2. Adult, Strensall, 1880. „			
Skin of male, Malta, Bree Coll.			

SPECIMENS MOUNTED OR SKINS.	SKELETONS.	EGGS.	CASE No.
Porzana bailloni, (Vieill.) <i>Baillon's Crake.</i>			
1. Killed against Telegraph Wires, Pocklington.	...	...	ccxlix
Porzana parva, (Scop.) <i>Little Crake.</i>	...	1 egg	
Genus Crex.			
Crex pratensis, Bechst. <i>Corn Crake or Landrail.</i>			
1. Marston, 1889. Purchased.	...	3 local clutches	ccli
2. Alne, 1888. „			
Genus Porphyrio.			
Porphyrio coeruleus, (Vand.) <i>Purple Gallinule.</i>			
Genus Gallinula.			
Gallinula chloropus, (Linn.) <i>Waterhen or Moorhen.</i>			
1 & 2. Shot at Heworth, Dec. 1890.	...	4 local clutches	ccliii
Genus Fulica.			
Fulica atra, Linn. <i>Coot.</i>			
1. Adult, York, Dec. 1899.	...	2 local clutches	ccliv
2. Adult, local.			
Family GRUIDÆ.			
Genus Grus.			
Grus communis, Bechst. <i>Common Crane.</i>			
Adult, Strickland Coll., probably local.	Sclerotic bones.	2 eggs	cclv
Order LIMICOLÆ.			
Family OTIDÆ.			
Genus Otis.			
Otis tarda, Linn. <i>Great Bustard.</i>			
1. Female, Rufforth, York, Feb. 1861. Purchased.	...	2 eggs	cclvi
1. Adult male, Strickland Coll. Skin of adult male, Bree Coll.	...	...	„ A
Otis tetrax, Linn. <i>Little Bustard.</i>			
1 to 6. Old Yorkshire specimens.	...	1 egg, South Russia	cclvii

SPECIMENS MOUNTED OR SKINS.	SKELETONS.	EGGS.	CASE No.
Otis undulata, (Jacq.) <i>Houbara Bustard.</i> Skin of female, Danube, Bree Coll.			
Otis macqueeni, J. E. Gray. <i>Macqueen's Bustard.</i> 1. Brigg, Lincolnshire, figured by Gould. Purchased.	...	...	cclix
Family ŒDICNEMIDÆ. Genus Œdicnemus. Œdicnemus scolopax, (Gmel.) <i>Stone Curlew.</i> 1 to 3. Strickland Collection, probably Yorkshire. 4. Holme-on-Spalding Moor. Purchased.	Sclerotic bones.	Clutch of 3, West Prussia ,, 2, Manton Warren ,, 2, " 2 odd eggs	cclx
Family GLARIOLIDÆ. Genus Glariola. Glariola pratincola, Linn. <i>Common Pratincole.</i>	...	Clutch of 4	
Family CHARADRIIDÆ. Genus Cursorius. Cursorius gallicus, (Gmel.) <i>Cream-coloured Courser.</i> Genus Charadrius. Charadrius pluvialis, Linn. <i>Golden Plover.</i> 1 & 2. Adult male and female, South Tyne Head, Cumberland, May 1888. Presented by J. Backhouse.	...	Clutch of 3 eggs, S. Hungary ,, 3 eggs, Germany 2 eggs, Shetland 2 eggs, Iceland	cclxiii
Charadrius fulvus, Gmel. <i>Eastern Golden Plover.</i> Genus Squatarola. Squatarola helvetica, (Linn.) <i>Grey Plover.</i> 1, 2 & 3. Rudston Collection, probably Yorkshire.	...	...	cclxv

SPECIMENS MOUNTED OR SKINS.	SKELETONS.	EGGS.	CASE No.
Genus <i>Ægialitis</i>.			
<i>Ægialitis cantiana</i>, (Lath.) <i>Kentish Plover.</i>	...	2 eggs, Copenhagen	
<i>Ægialitis curonica</i>, (Gmel.) <i>Little-ringed Plover.</i>			
Skin of adult female, Malta (L. Adams), May 1861, Bree Coll.	...	Clutch of 4 eggs, Farøe Isles.	
<i>Ægialitis hiaticula</i>, (Linn.) <i>Ringed Plover.</i>			
1. Adult, Spurn Point. Skin of adult male, Sussex Coast, Feb. 1867, Bree Coll. Skin of immature bird, St. Leonard's, Feb. 1867, Bree Coll. Skins of 2 adult males, Brightlingsea, Summer 1863, Bree Coll. Skin of immature bird, Brightlingsea, Summer 1863.	...	7 odd eggs	cclxviii
Genus <i>Endromias</i>.			
<i>Endromias morinellus</i>, (Linn.) <i>Mountain Dotterel.</i>			
1 & 2. Adults, Strickland Coll. 3 & 4. Southport. Purchased.	...	1 egg	cclxix
Genus <i>Vanellus</i>.			
<i>Vanellus vulgaris</i>, Bechst. <i>Lapwing or Green Plover.</i>			
1 & 2. Heworth, Nov. 1890. 1. Variety, Yorkshire, June 1898. Purchased. Skin of adult, Mersea Island, 1872, Bree Coll.	Several local clutches	cclxx " A
Genus <i>Strepsilas</i>.			
<i>Strepsilas interpres</i>, (Linn.) <i>Turnstone.</i>			
1 to 5. Yorkshire, mostly from Easing- ton.	cclxxi

SPECIMENS MOUNTED OR SKINS.	SKELETONS.	EGGS.	CASE No.
Genus Hæmatopus.			
Hæmatopus ostralagus, Linn. <i>Oystercatcher.</i>	...	6 eggs	
Family SCOLOPACIDÆ.			
Genus Recurvirostra.			
Recurvirostra avocetta, Linn. <i>Avocet.</i>			
1. Adult, Scarbro', shot about 1865. Purchased.	...	3 eggs, West Prussia 1 egg	cclxxiii
Genus Himantopus.			
Himantopus candidus, Bonnat. <i>Black-winged Stilt.</i>			
Skin of immature bird, Gibraltar, Bree Coll.			
Genus Phalaropus.			
Phalaropus hyperboreus (Linn.) <i>Red-necked Phalarope.</i>			
Skins of adult male and female, Greenland, Bree Coll.	...	Clutch of 4, South Russia ,, 6, Iceland	
Phalaropus fulicarius, Linn. <i>Grey Phalarope.</i>			
Male, Cayton Bay, Scarbro', Sept. 1896. 1 & 2. Females, Scalby, near Scarbro', Oct. 1896. Purchased.	...	1 egg, without data	cclxxvi
Skin of adult male, Summer, Greenland, Bree Coll.			
Genus Scolopax.			
Scolopax rusticula, Linn. <i>Woodcock.</i>			
1. Adult, Easington, Feb. 1901. 2. Adult, Low Dunsforth, near York, Nov. 1900. Purchased.	Sclerotic bones.	Clutch of 3, Bray, Iceland	cclxxvii
Genus Gallinago.			
Gallinago major, Gmel. <i>Great Snipe.</i>			
1. Rudston Coll. 2. Adult, Hayton, Yorks., shot by the Rev. R. Surtees, Sept. 1878, Rudston Coll. 3. Adult, Hayton, shot by Mr. Read, Sept. 1862. 4. Adult, shot in Bolton Park, 1872. Presented by Lord Bolton.	...	2 eggs, without data	cclxxviii

SPECIMENS MOUNTED OR SKINS.	SKELETONS.	EGGS.	CASE No.
Gallinago coelestis, Frenzel. <i>Common Snipe.</i>	...	5 local clutches	
Gallinago gallinula, Linn. <i>Jack Snipe.</i>			
Genus Limicola.			
Limicola platyrhyncha (Temm.) <i>Broad-billed Sandpiper.</i>			
Genus Tringa.			
Tringa fuscicollis, Vieill. <i>Bonaparte's Sandpiper.</i>			
Tringa alpina, Linn. <i>Dunlin.</i>			
1 to 5. Autumn plumage, Spurn. Presented by J. Backhouse.	...	Clutch of 4, Iceland	cclxxxiii
1 to 4. Winter plumage, Easington, Yorks.	...	„ 4, Sweden	„ A
2 & 3. Adult male & female, Hiddensöe, Summer 1887. Purchased	„ B
Skin of adult male, Spurn, May 1899.			
Skin of adult, Winter, Spurn, 1896. Presented by J. Backhouse.			
Skin of immature bird, St. Leonard's, Feb. 1867, Bree Coll.			
Skin of immature female, Isle of Wight, Feb. 1867, Bree Coll.			
Skin of female, Spurn, May 1901. Killed against Telegraph Wires.			
Tringa maculata, Vieill. <i>Pectoral Sandpiper.</i>			
Skin from Unst, Shetland, June 20th, 1839, Bree Coll.			
Tringa minuta, Leisl. <i>Little Stint.</i>			
Tringa subarquata, (Göld.) <i>Curlew Sandpiper.</i>			
1 & 2. Immature birds, Spurn point, Autumn 1877. Presented by J. Backhouse.	cclxxxvi
Skins of 2 in Autumn dress, Aldborough, 1870, Bree Coll.			

SPECIMENS MOUNTED OR SKINS.	SKELETONS.	EGGS.	CASE No.
Tringa striata, Linn.			
<i>Purple Sandpiper.</i>			
1 to 3. Walton-on-the-Naze, Essex, Winter 1888 (Backhouse).	...	Clutch of 3, Sweden 2 clutches of 3, Iceland	cclxxxvii
Skin of adult female, Summer, Bree Coll.			
Tringa canutus, Linn.			
<i>Knot.</i>			
Skin of male, Spurn, Summer 1894.	...	Clutch of 4, Sweden	
Skins of 3 adults, Winter 1879, Essex Coast, Bree Coll.			
Genus Machetes.			
Machetes pugnax, (Linn.)			
<i>Ruff.</i>			
1. Large case (Ruffs and Reeves), Strickland Coll.	...	Clutch of 3, Friesland 3 eggs, no data	cclxxxix
Skin of adult male, Danube, Bree Coll.			
Genus Calidris.			
Calidris arenaria, (Linn.)			
<i>Sanderling.</i>			
1 & 2. Strickland Coll.	CCLXC
3 & 4. Easington, Yorks., May 1888.			
Skin of adult male, Winter, Sussex, 1867, Bree Coll.			
Skin of 2 males and 1 female, Spurn, Sept. 1894 (Loten).			
Skin of male, Romney Marsh, Sept. 1881, Bree Coll.			
Skin of adult female, Spurn, Jan. 1901.			
Genus Totanus.			
Totanus hypoleucus, (Linn.)			
<i>Common Sandpiper.</i>			
Skin of female, killed at Spurn Light- house, May 1899.	...	Clutch of 4, Loch Awe Clutch of 4, Sweden 2 odd eggs	
Skin of adult, Colchester, Aug. 1861, Bree Coll.			

SPECIMENS MOUNTED OR SKINS.	SKELETONS.	EGGS.	CASE No.
Totanus ochropus, (Linn.) <i>Green Sandpiper.</i> 1 & 2. Pair of adults, Yorkshire Coast. Skin of female, Aug. 1861, Colchester, Bree Coll. Skins of 3 nestlings, Sweden, 1875, Bree Coll.	CCXCII
Totanus glareola, (Linn.) <i>Wood Sandpiper.</i> Skins of 2 adults, Malta, May, Bree Coll.	...	Clutch of 4, Denmark	
Totanus calidris, (Linn.) <i>Redshank.</i> 1 & 2. Adults, Scarbro', Purchased. Skin of male, Romney Marsh, Sept. 1882, Bree Coll.	...	5 local clutches	CCXCIV
Totanus fuscus, (Linn.) <i>Spotted Redshank.</i>			
Totanus canescens, (Gmel.) <i>Greenshank.</i>	...	2 eggs	
Genus Limosa.			
Limosa lapponica, (Linn.) <i>Bar-tailed Godwit.</i> 1 & 2. Strickland Coll. 3 & 4. Immature birds from Bridlington, Sept. 1888.	CCXCVII
Limosa ægocephala, (Linn.) <i>Black-tailed Godwit.</i> 1. Strickland Coll. 2 to 4. Cottingwith, Sept. 1888.	...	2 odd eggs Clutch of 3, Denmark	CCXCVIII
Genus Numenius.			
Numenius arquata, (Linn.) <i>Curlew.</i> 1. Male, Yorkshire? 2. Female, Holderness (Riley).	...	2 Yorkshire clutches 1 clutch (2), Norfolk 1 odd egg	CCXCIX
Numenius phæopus, (Linn.) <i>Whimbrel.</i>	...	2 clutches of 3 each, Iceland Clutch of 3, Pomerania	
Numenius borealis, (Forst.) <i>Esquimaux Curlew.</i>			

SPECIMENS MOUNTED OR SKINS.	SKELETONS.	EGGS.	CASE No.
Order GAVIÆ.			
Family LARIDÆ.			
Sub-Family STERNINÆ.			
Genus Sterna.			
Sterna macrura, Naum. <i>Arctic Tern.</i>			
Skin of immature male, Easington, Yorks., Oct. 1900.	...	Odd eggs without locality	
Sterna fluviatilis, Naum. <i>Common Tern.</i>	...	Several odd eggs without locality	
Sterna dougalli, Mont. <i>Roseate Tern.</i>	...	2 eggs of doubtful locality	
Sterna minuta, Linn. <i>Lesser Tern.</i>			
1 & 2. Pair of adults, Flamborough, Aug. 1893.	...	Clutch of 3, Spurn	CCCV
Sterna caspia, Pall. <i>Caspian Tern.</i>	...	1 egg	
Sterna anglica, Mont. <i>Gull-billed Tern.</i>	...	1 egg, labelled Smyrna	
Sterna cantiaca, Gmel. <i>Sandwich Tern.</i>	...	16 eggs without data	
Sterna fuliginosa, Gmel. <i>Sooty Tern.</i>			
Genus Hydrochelidon.			
Hydrochelidon hybrida, (Pall.) <i>Whiskered Tern.</i>	...	1 egg	
Hydrochelidon leucoptera, (Schinz.) <i>White-winged Black Tern.</i>			

SPECIMENS MOUNTED OR SKINS.	SKELETONS.	EGGS.	CASE No.
Hydrochelidon nigra, (Linn.) <i>Black Tern.</i>			
1. Immature, Easington, 1901.	...	4 eggs	CCCXII
Sub-Family LARINÆ.			
Genus Xema.			
Xema sabinii, (Sabine.) <i>Sabine's Gull.</i>			
1. Young in first plumage.	CCCXIII
2. Adult male. Both killed at Flam- borough, Sept. 1890. Presented by the late Canon Raine.	
Genus Rhodostethia.			
Rhodostethia rosea, (Macgill.) <i>Ross's Gull.</i>			
Genus Pagophila.			
Pagophila eburnea, (Phipps.) <i>Ivory Gull.</i>	CCCXV
Genus Larus.			
Larus ridibundus, Linn. <i>Black-headed Gull.</i>			
1. Adult, Bridlington, Winter 1887.	...	Various Yorkshire clutches	CCCXVI
2. Adult male, Oland, Summer. Pur- chased.			
3. Young male, Solway, Aug. 1885. Purchased.			
Larus ichthyætus, Pall. <i>Great Black-headed Gull.</i>			
Larus minutus, Pall. <i>Little Gull.</i>			
1 & 2. Immature bird, Rudston Coll.	...	1 egg	CCCXVIII
1. Adult, Winter, Rudston Coll.	" A
2. Adult, Summer, Strickland Coll.			
3. Adult, Scarbro', Oct. 1886. Pur- chased.			

SPECIMENS MOUNTED OR SKINS.	SKELETONS.	EGGS.	CASE No.
Larus canus, Linn. <i>Common Gull.</i>			
1. Filey, 1897 (Watson).	...	4 eggs	CCCXIX
2. Immature bird, Spurn, 1901.			
Larus argentatus, Gmel. <i>Herring Gull.</i>			
1. Adult male, Dec. 1888.	Sclerotic bones.	4 Yorkshire clutches	CCCXX
2. Immature, Feb. 1889, Scarbro'.			
3. Adult female, March 1889, Scarbro'			
Larus fuscus, Linn. <i>Lesser Black-backed Gull.</i>	...	2 Scotch clutches Several eggs, Farne Islands	
Larus marinus, Linn. <i>Greater Black-backed Gull.</i>			
1 & 2. Adults, Bridlington, 1895. Presented by Mr. Boynton.	...	2 eggs	CCCXXII
1 & 2. Immature bird, Spurn, Jan. 1896 (Watson).	...	...	" A
Larus glaucus, Faber. <i>Glaucus Gull.</i>			
1. Immature bird, Bridlington, Nov. 1888. Purchased.	...	2 eggs, doubtful	CCCXXIII
2. Adult, Bridlington. Purchased.			
Larus leucopterus, Faber. <i>Iceland Gull.</i>			
1. Purchased. Yorkshire ?	...	1 egg, doubtful	CCCXXIV
Genus Rissa.			
Rissa tridactyla, (Linn.) <i>Kittiwake.</i>			
Skins of 2 adults males, Spurn, Jan. and February, 1901.			
1 & 2. Bridlington, Aug. 1888. Purchased.	...	Several Yorkshire clutches	CCCXXV
3 & 4. Strickland Coll.	...		
1. Adult, Summer, Bridlington.			
2 & 3. Adults, Winter, Strickland Coll.	...	...	" A

SPECIMENS MOUNTED OR SKINS.	SKELETONS.	EGGS.	CASE No.
Sub-Family			
STERCORARIINÆ.			
Genus <i>Stercorarius</i> .			
<i>Stercorarius catarrhactes</i>, Linn. <i>Great Skua.</i>			
<i>Stercorarius pomatorhinus</i>, (Temm.) <i>Pomatorhine Skua.</i>			
1. Adult, Spurn, May 1887.	...	2 eggs	CCCXXVII
2. Adult female, Lapland, June 1888. Purchased.			
3 & 4. Immature bird, Bridlington.			
1. Picked up at Harome, Yorks., Dec. 1895. Presented by J. Back- house.	...	... ..	„ A
<i>Stercorarius crepidatus</i> (Banks) <i>Richardson's Skua.</i>	Sclerotic bones.	2 eggs, Greenland 3 eggs	
<i>Stercorarius parasiticus</i> (Linn.) <i>Buffon's Skua.</i>			
1. Adult, Bridlington, Sept. 1893. Presented by the late Canon Raine.	...	2 eggs labelled Faroe Islands	CCCXXIX
1 & 2. Strickland Coll.			
Order TUBINARES.			
Family PROCELLARIIDÆ.			
Genus <i>Procellaria</i> .			
<i>Procellaria pelagica</i>, Linn. <i>Stormy Petrel.</i>	...	3 eggs	
<i>Procellaria leucorrhoa</i>, Vieill. <i>Leach's Petrel.</i>			
1 to 3. Adults, St. Kilda, Purchased.	...	1 egg	CCCXXXI
1. Adult, Bolton Park, 1872.	...	... ..	„ A
Skins of male and female, Greenland, Bree Coll.			

SPECIMENS MOUNTED OR SKINS.

SKELETONS.

EGGS.

CASE
No.

Genus Oceanites.

Oceanites oceanicus, (Kuhl.)*Wilson's Petrel.*

Genus Puffinus.

Puffinus anglorum, (Temm.)*Manx Shearwater.*

1. Adult, Scarbro'. Purchased.
2. Yorkshire. Presented by the Rev. C. Waldey.

...

2 eggs

cccxxxiii

Puffinus yelkouan, (Acerbi.)*Lerantine Shearwater.*

1. Adult, Flambro', 1890. Purchased.
(Probably the first specimen known as British-killed).

...

...

...

cccxxxiv

Puffinus griseus, (Gmel.)*Sooty Shearwater.*

- 1 & 2. Pair shot at Flambro', Aug. 1887. Presented by J. Backhouse.
Skin of adult, Teesmouth, Aug. 1828.
(See "Yarrell," 4th Ed., Vol. 4, p. 17)

...

...

...

cccxxxv

Puffinus major, Faber.*Great Shearwater.*

- Skin of adult female (breeding) 1861,
Bree Coll.

Genus Fulmarus.

Fulmarus glacialis, (Linn.)*Fulmar Petrel.*

- 1 & 2. Young, Rudston Coll.
3. Strickland Coll.

...

1 egg, Faroe Islands

cccxxxvii

Genus Bulweria.

Bulweria columbina (Moq-Tand)*Bulwer's Petrel.*

1. Adult, Strickland Coll.
1. Adult, Tanfield.

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cccxxxviii

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...

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...

" A

SPECIMENS MOUNTED OR SKINS.	SKELETONS.	EGGS.	CASE No.
Order ALCÆ.			
Family ALCIDÆ.			
Genus Alca.			
Alca torda, Linn.			
<i>Razorbill.</i>			
1 & 2. Bridlington, Feb. 1891.	Sclerotic bones.	Many Yorkshire eggs	cccxxxix
Alca impennis, Linn.			
<i>Great Auk or Gare Fowl.</i>			
1. Rudston Coll. Presented by Mr. Bell, Thirsk.	...	1 Cast	cccxl
2. Strickland Coll.	...	... ..	„ A
Genus Lomvia.			
Lomvia troile, (Linn.)			
<i>Guillemot.</i>			
1 & 2. Adults and nestling, Speeton, Bridlington.	Sclerotic bones.	Many Yorkshire eggs	cccxli
1 & 2. Ringed variety, Scarbro', Feb. 1890. Purchased.	...	... ..	„ A
Skin of female, Colchester, Jan. 1861, Bree Coll.			
Skin of nestling, Filey, Aug. 1886.			
Lomvia brunnichii, (Sabine.)	...	1 egg	
<i>Brunnich's Guillemot.</i>			
Genus Uria.			
Uria grylle, (Linn.)			
<i>Black Guillemot.</i>			
1 & 2. Pair of adults, Speeton, 1894. Purchased.	...	8 eggs	cccxlili
1 & 2. Immature bird, West of Ireland, Autumn 1889. Presented by the late Mr. Garwood.	...	... ..	„ A
Genus Mergulus.			
Mergulus alle, (Linn.)			
<i>Little Auk.</i>			
1 & 3. Scarbro', Feb. 1890.	...	... ..	cccxliv
2. Hull, Feb. 1890.			
Skins of male and female, Spurn, Feb. 1900.			

SPECIMENS MOUNTED OR SKINS.

SKELETONS.

EGGS.

CASE
No.**Genus Fratercula.****Fratercula arctica, (Linn.)***Puffin.*

1 & 2. Adults, Bridlington?

Skin of adult, Filey, Aug. 1886.

...

6 eggs, Speeton

cccxliv

Order PYGOPODES.**Family COLYMBIDÆ.****Genus Colymbus.****Colymbus glacialis, Linn.***Great Northern Diver.*1. Adult, Iceland, 1893. Presented
by Dr. T. Anderson.

2. Adult, Rudston Coll.

Skin of Immature male, probably British.
Bree Coll.Sclerotic
bones.

1 clutch, Iceland

cccxlv

Colymbus arcticus, Linn.*Black-throated Diver.*Skin of Immature male, Skeffling, Yorks.
Nov. 1895 (Loten).Sclerotic
bones.

1 egg

Colymbus septentrionalis, Linn.*Red-throated Diver.*1. Young male, Bridlington, Oct. 1888
(Allan).2. Young, Scarbro', December 1887.
Presented by J. Backhouse.3. Adult male, Bridlington, Oct. 1888
(Allan).Skin of young female. Killed at Spurn
Lighthouse, Oct. 1900.Skin of adult, Winter, October 1869,
Sweden, Bree Coll.Skin of immature bird, Winter, Essex
Coast, 1879, Bree Coll.Sclerotic
bones.

1 clutches, Shetland

cccxlvi

Family PODICIPIDÆ.**Genus Podiceps.****Podiceps cristatus, (Linn.)***Great Crested Grebe.*Sclerotic
bones.Clutch of 3, Hornsey Mere
4 eggs

SPECIMENS MOUNTED OR SKINS.	SKELETONS.	EGGS.	CASE No.
Podiceps griseigena, (Bodd.) <i>Red-necked Grebe.</i>			
1 & 3. Strickland Coll.	...	1 egg	cccl
2. Bridlington, Sept. 5th, 1888.	„ A
1. Immature bird, Summer. Picked up dead near York.			
1. Immature bird, Winter, Flambro'.			
2. Immature bird, Winter, Holderness. Purchased.			
Skin of adult, Winter, Colchester, 1879, Bree Coll.			
Skin of immature bird, Winter, Col- chester, 1860, Bree Coll.			
Podiceps auritus, (Linn.) <i>Slavonian Grebe.</i>			
1. Immature bird, Winter, Yorks.	...	1 egg	cccli
Podiceps nigricollis, C.L. Brehm. <i>Eared Grebe.</i>	...	2 eggs	
Podiceps fluviatilis, (Tunstall.) <i>Little Grebe.</i>			
1 to 3. Summer plumage, Clifton, York, Jan. 1899. Purchased.	...	4 local clutches	cccliii
Skin of male. Killed at Spurn Light- house, Nov. 1900.			
Skin of male, Summer, Colchester, Aug. 1861, Bree Coll.			
Skin of young bird, Colchester, 1878, Bree Coll.			

CATALOGUE

OF

BRITISH PLANTS IN THE HERBARIUM

OF THE

YORKSHIRE PHILOSOPHICAL SOCIETY.

PART VIII.

CATALOGUE OF BRITISH PLANTS IN THE HERBARIUM

OF THE

YORKSHIRE PHILOSOPHICAL SOCIETY.

PART VIII.

COMPILED BY HENRY J. WILKINSON, HON. CURATOR, BOTANY.

UMBELLIFERÆ.

	DATE.	COLLECTOR.	HERBARIUM.
502. Hydrocotyle vulgaris, Linn. <i>Bogs, marshes, &c., Shetland, southwards.</i> <i>Distrib.</i> Europe, W. Asia, N. Africa.			
<i>Sp.</i> Copgrove, Yorks.	1790	J. Dalton	Rev. J. Dalton
Shipley Moor, Yorks.	1800	S. Hailstone	S. Hailstone
Heslington, York.	1806	W. Middleton	W. Middleton
Skipwith Common, Yorks.	1881	H. J. Wilkinson	H. J. Wilkinson
503. Eryngium maritimum, Linn. <i>Sandy shores, from Aberdeen, southwards.</i> <i>Distrib.</i> Shores of Atlantic, Mediterra- nean, &c,			
<i>Sp.</i> Hartlepool, Durham	1799	S. Hailstone	S. Hailstone
Blackpool, Lanes.	1801	„	„
On the shore beyond Bootle	1805	„	„
Fleetwood, Lanes.	1842	„	„
Coast of Kent	1806	W. Middleton	W. Middleton
Banks of Humber, Skeffling, E. Yorks.	1893	H. J. Wilkinson	H. J. Wilkinson

	DATE.	COLLECTOR.	HERBARIUM.
504. Eryngium campestre, Linn. <i>Alien.</i>			
<i>Sp.</i> Near Newcastle, Northumberland ...	(1800)	Mr. Winch	Rev. J. Dalton
Near Newcastle ,, ...	1840	J. Storey	S. Hailstone
505. Astrantia major, Linn. <i>Alien.</i>			
<i>Sp.</i> Stokesay Wood, Ludlow, Salop ...	1883	T. Archer Briggs	W. Whitwell
506. Sanicula europæa, Linn. <i>Copses, &c., from Caithness, southwards.</i> <i>Distrib.</i> Europe, Himalaya, North and Tropical Africa.			
<i>Sp.</i> Bingley Woods, Yorks.	1806	S. Hailstone	S. Hailstone
Knareboro', Yorks.	1790	J. Dalton	Rev. J. Dalton
Castle Howard, Yorks.	1800	W. Middleton	W. Middleton
507. Physospermum commu- tatum, Spreng. <i>Copses, &c., South Devon & Cornwall.</i> <i>Distrib.</i> South of France and Spain.			
<i>Sp.</i> Near Bodmin, Cornwall	(1800)	Sir T. Gage	Rev. J. Dalton
Near Bodmin ,,	(1800)	D. Turner	,,
508. Conium maculatum, Linn. <i>River banks, roadsides, &c., from Orkney,</i> <i>southwards.</i> <i>Distrib.</i> Europe, N. Africa, N. and W. Asia.			
<i>Sp.</i> Devil's Ditch, Cambs.	1845	S. Hailstone	S. Hailstone
Copgrove, Yorks.	1790	J. Dalton	Rev. J. Dalton
Moat, Scarboro' Castle, Yorks. ...	1800	W. Middleton	W. Middleton
Clifton Ings, York	1900	H. J. Wilkinson	H. J. Wilkinson

**509. *Smyrnum olusatrum*,
Linn.**

*Waste places, amongst ruins, and near
the sea.*

Distrib. From Holland, southwards.

<i>Sp.</i> Castle Hill, Scarboro', Yorks. ...	1813	S. Hailstone	S. Hailstone
Hastings, Sussex	1834	„	„
Tynemouth, Northumberland ...	1809	J. Dalton	Rev. J. Dalton
Rochester Castle, Kent	1800	W. Middleton	W. Middleton

**510. *Bupleurum rotundifolium*
Linn.**

*Chalky fields, &c., from Yorkshire to
Somerset.*

Distrib. Europe, W. Asia.

<i>Sp.</i> Copgrove, Yorks.	1790	J. Dalton	Rev. J. Dalton
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**511. *Bupleurum aristatum*,
Bartl.**

Sandy banks, Devon, &c.

Distrib. From France, southwards and
eastwards.

<i>Sp.</i> Park Hill, Torquay, Devon... ..	1848	Miss Griffith	S. Hailstone
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**512. *Bupleurum tenuissimum*
Linn.**

*Salt marshes, &c., from Durham, south-
wards.*

Distrib. Europe, N. Africa, W. Asia.

<i>Sp.</i> Selsey, Sussex	1809	J. Dalton	Rev. J. Dalton
Hastings „	1830	S. Hailstone	S. Hailstone
Yarmouth, Norfolk	1800	J. Dalton	Rev. J. Dalton

513. Bupleurum falcatum,
Linn. Alien.

Hedgerows, &c., Surrey and Essex.

Distrib. From Belgium, southwards.

<i>Sp.</i> Chelmsford, Essex	1842	J. Ray	S. Hailstone
Ongar ,,	1848	G. E. Dennes	,,

514. Trinia vulgaris, Linn.

Limestone rocks, South Devon and North Somerset.

Distrib. From Belgium, southwards.

<i>Sp.</i> St. Vincent's Rocks, Bristol, Glosters.	1840	G. H. K. Thwaites	S. Hailstone
St. Vincent's Rocks ,, ,,	1840	Dr. Woods	,,
St. Vincent's Rocks ,, ,,	1883	H. Fisher	H. J. Wilkinson

515. Apium graveolens, Linn.

Marshy places by the sea, &c., from Perth, southwards.

Distrib. Europe, N. Africa, W. Asia.

<i>Sp.</i> Ditches at Coatham, Yorks. ...	1799	S. Hailstone	S. Hailstone
Ditches at Marske ,, ...	1799	,,	,,
Hambleton Dike, between Monk Fryston and Selby, Yorks. ...	1807	,,	,,
Kent	1810	W. Middleton	W. Middleton
Banks of the Humber, Skeffling, S. Yorks.... ...	1893	H. J. Wilkinson	H. J. Wilkinson

516. Apium nodiflorum,
Reichb.

Marshy places, from the Clyde, southwards

Distrib. Belgium, southwards, N. and W. Asia.

<i>Sp.</i> Coatham, N.E. Yorks.	1799	S. Hailstone	S. Hailstone
Holgate, York	1800	,,	,,
Bottisham, Cambs.	1843	,,	,,
Scarboro', Yorks.	1813	W. Middleton	W. Middleton
Copgrove, Yorks.	1790	J. Dalton	Rev. J. Dalton

	DATE.	COLLECTOR.	HERBARIUM.
517. <i>Apium nodiflorum</i>. <i>Var. repens</i> (Koch.)			
<i>Sp.</i> Haddington, Scotland	1839	W. H. Campbell	S. Hailstone
518. <i>Apium nodiflorum</i>. <i>Var. ochreatum</i> (D.C.)			
<i>Sp.</i> Haxey, Lincolnshire	1883	G. Webster	H. J. Wilkinson
519. <i>Apium inundatum</i>, Reichb. <i>Wet places, from Orkney, southwards.</i> <i>Distrib.</i> From Goathland, southwards.			
<i>Sp.</i> Copgrove, Yorks.	1790	J. Dalton	Rev. J. Dalton
Pond, Dringhouses, York	1806	S. Hailstone	S. Hailstone
Strensall, York	1800	W. Middleton	W. Middleton
520. <i>Cicuta virosa</i>, Linn. <i>Banks of rivers, &c., Forfar to Somerset.</i> <i>Distrib.</i> N. and Mid. Europe (Arctic), N. Asia.			
<i>Sp.</i> Prickwillow Bridge, Ely, Cambs. ...	1786	Dr. Goodenough	Rev. J. Dalton
Yarmouth, Norfolk	1800	J. Dalton	,,
Yarmouth ,,	1843	Mr. Fitt	S. Hailstone
521. <i>Carum verticillatum</i>, Koch. <i>Meadows, &c., from Argyll to Cornwall.</i> <i>Distrib.</i> West Europe, from Holland, southwards.			
<i>Sp.</i> Cornwall	1809	D. Turner	S. Hailstone
Loch Lomond, Scotland	1806	J. Dalton	Rev. J. Dalton
522. <i>Carum segetum</i>, Benth. <i>Hedgebanks, &c., from York, southwards.</i> <i>Distrib.</i> W. Europe.			
<i>Sp.</i> Cornfields, near Hull, Yorks. ...	1800	W. Brunton	Rev. J. Dalton

	DATE.	COLLECTOR.	HERBARIUM.
523. Carum carui, Linn. Alien.			
<i>Sp.</i> By the roadside, near Sawley Moor, Ripon, Yorks.	1796	W. Brunton	Rev. J. Dalton
Grantley, Ripon, Yorks.	1790	J. Dalton	„
524. Sison amomum. Linn.			
<i>Hedgebanks, &c., from York, southwards.</i>			
<i>Distrib.</i> W. Europe.			
<i>Sp.</i> Grantchester Mill, Camb.	1839	S. Hailstone	S. Hailstone
Pevensey Castle, Sussex	1843	„	„
525. Sium latifolium, Linn.			
<i>Riversides, &c., from Stirling to Devon.</i>			
<i>Distrib.</i> Europe, N.W. Asia, &c.			
<i>Sp.</i> Moat at York	1800	W. Brunton	S. Hailstone
Foss, Navigation, York (in plenty)...	1786	J. Dalton	Rev. J. Dalton
Huntington, York (River Foss) ...	1881	H. J. Wilkinson	H. J. Wilkinson
526. Sium erectum, Huds.			
<i>Wet places, from Elgin, southwards.</i>			
<i>Distrib.</i> Europe.			
<i>Sp.</i> Grantchester Mill, Camb.	1839	S. Hailstone	S. Hailstone
Milnthorpe, Westmoreland	1804	„	„
Boroughbridge, Yorks.	1790	J. Dalton	Rev. J. Dalton
River Foss, York	1881	H. J. Wilkinson	H. J. Wilkinson
527. Ægopodium podagraria, Linn.			
<i>Waste places, from Elgin, southwards.</i>			
<i>Distrib.</i> N. and Mid. Europe, W. Asia.			
<i>Sp.</i> Near the Public House called “Four Ashes,” Horton Lane, Bradford, Yorks.	1807	S. Hailstone	S. Hailstone
Copgrove, Yorks.	1790	J. Dalton	Rev. J. Dalton

**528. Pimpinella saxifraga,
Linn.**

Dry pastures, from Sutherland, south-wards.

Distrib. Europe (Arctic), N. & W. Asia.

Sp. Pennyoaks and other places about

Bradford, Yorks.... ..

Field beyond North Street Postern,

York

Croft, N. Yorks.

DATE.

COLLECTOR.

HERBARIUM.

1800

S. Hailstone

S. Hailstone

1811

„

„

1830

J. Dalton

Rev. J. Dalton

529. Pimpinella major, Huds.

Hedgerows, waste places, Perth, south-wards.

Distrib. N. & Mid. Europe, Caucasus.

Sp. Copgrove, Yorks.

Under the Walls of York

Burnley, Lanes.

Clifton, York

1790

J. Dalton

Rev. J. Dalton

1806

S. Hailstone

S. Hailstone

1810

„

„

1881

H. J. Wilkinson

H. J. Wilkinson

**530. Conopodium denudatum
Koch.**

Woods and fields, Shetland to Channel Islands.

Distrib. W. Europe.

Sp. York

Heslington, Yorks.... ..

Copgrove „

Poppleton „

1803

S. Hailstone

S. Hailstone

1800

W. Middleton

W. Middleton

1790

J. Dalton

Rev. J. Dalton

1881

H. J. Wilkinson

H. J. Wilkinson

531. Myrrhis odorata, Scop.

Pastures, &c., from South Wales to Caithness.

Distrib. From France, S. and E. to Caucasus.

Sp. Knaresboro', Yorks.

Gilla Leys, Castle Howard, Yorks....

Eskdale, N.E. Yorks.

Thorp Arch „

1790

J. Dalton

Rev. J. Dalton

1810

R. Spruce

H. J. Wilkinson

1800

W. Middleton

W. Middleton

1840

S. Hailstone

S. Hailstone

	DATE.	COLLECTOR.	HERBARIUM.
532. Chærophylum temulum, Linn.			
<i>Fields and waste places, from Caithness, southwards.</i>			
<i>Distrib. Europe, Caucasus, N. Africa.</i>			
<i>Sp.</i> Copgrove, Yorks.	1790	J. Dalton	Rev. J. Dalton
York	1806	W. Middleton	W. Middleton
Thorp Arch, Yorks.... ...	1840	S. Hailstone	S. Hailstone
533. Scandix pecten-veneris, Linn.			
<i>A cornfield weed, from Caithness, south- wards.</i>			
<i>Distrib. Europe, N. Africa, W. Asia.</i>			
<i>Sp.</i> Copgrove, Yorks.	1790	J. Dalton	Rev. J. Dalton
Heslington ,,	1806	W. Middleton	W. Middleton
Thorp Arch ,,	1840	S. Hailstone	S. Hailstone
534. Anthriscus vulgaris, Pers			
<i>Hedgekanks, &c., Shetland to Channel Islands.</i>			
<i>Distrib. Europe, N. Africa, Siberia.</i>			
<i>Sp.</i> Ripen, Yorks.	1800	W. Branton	S. Hailstone
Copgrove ,,	1790	J. Dalton	Rev. J. Dalton
535. Anthriscus sylvestris, Hoffm.			
<i>Hedgebanks, &c., Shetland to Channel Islands.</i>			
<i>Distrib. Europe (Arctic), Caucasus, N. Asia.</i>			
<i>Sp.</i> Copgrove, Yorks.	1790	J. Dalton	Rev. J. Dalton
Thorp Arch ,,	1840	S. Hailstone	S. Hailstone
536 Anthriscus cerefolium, Hoffm. Alien.			
<i>Sp.</i> Whalley Abbey, Lanes.	1807	S. Hailstone	S. Hailstone

537. *Seseli libanotis*, Koch.*Chalk hills, &c., Sussex, Cambridge, &c.**Distrib.* Europe (Arctic), W. Asia.

	DATE.	COLLECTOR.	HERBARIUM.
<i>Sp.</i> Hinton, Cambs.	1786	J. Dalton	Rev. J. Dalton
Hinton ,,	1830	Prof. Henslow	,,
Gogmagog Hills, Cambs.	1840	S. Hailstone	S. Hailstone

538. *Foeniculum officinale*, All.*Sea cliffs, &c., North Wales, Norfolk, and Cornwall.**Distrib.* From Belgium, southwards, N. Africa.

<i>Sp.</i> Near Carnarvon, Wales	1840	S. Hailstone	S. Hailstone
Burgh Castle, Suffolk	1840	,,	,,
Southwick, Sussex	1810	J. Dalton	Rev. J. Dalton
Kent	1804	W. Middleton	W. Middleton
Burwell Pit, Cambs... ..	1830	J. Dalton	Rev. J. Dalton

**539. *Crithmum maritimum*,
Linn.***Maritime rocks, from Ayr, southwards.**Distrib.* Coasts of N. Atlantic, Mediterranean, &c.

<i>Sp.</i> Dover Cliffs, Kent	1806	D. Turner	Rev. J. Dalton
Torquay, Devon	1826	J. Dalton	,,
Hastings, Sussex	1830	S. Hailstone	S. Hailstone

540. *Oenanthe fistulosa*, Linn.*Ditches, &c., from Ayr, southwards.**Distrib.* Europe, N. Africa, W. Asia.

<i>Sp.</i> Knavesmire, York	1806	S. Hailstone	S. Hailstone
Copgrove, Yorks.	1790	J. Dalton	Rev. J. Dalton
Clifton Ings, York	1881	H. J. Wilkinson	H. J. Wilkinson

	DATE.	COLLECTOR.	HERBARIUM.
541. <i>Ænanthe pimpinelloides</i>, Linn.			
<i>Meadows and banks, from Worcester to Cornwall.</i>			
<i>Distrib.</i> Europe, from Belgium, south- wards.			
<i>Sp.</i> Christchurch, Hants	1885	H. Fisher	H. J. Wilkinson
542. <i>Ænanthe peucedanifolia</i>, Poll.			
<i>Moist meadows and ditches, Notts to Kent.</i>			
<i>Distrib.</i> S. Europe to the Caspian.			
<i>Sp.</i> Godalming, Surrey	1847	J. D. Salmon	S. Hailstone
543. <i>Ænanthe lachenalii</i>, Gmel.			
<i>Marshes, from Argyll, southwards.</i>			
<i>Distrib.</i> From Denmark, southwards.			
<i>Sp.</i> Copgrove, Yorks. (sub-nom <i>pimpinelloides</i>)	1790	J. Dalton	Rev. J. Dalton
Yarmouth, Norfolk	1840	J. Fitt	S. Hailstone
Sutton Wharf, Leicestershire ...	(1840)	Rev. A. Bloxam	„
544. <i>Ænanthe crocata</i>, Linn.			
<i>Marshes and ditches, from Ross, south- wards.</i>			
<i>Distrib.</i> From France to Spain.			
<i>Sp.</i> Eccleshill	1800	S. Hailstone	S. Hailstone
Leeds & Liverpool Canal, near Silsden, Yorks.	1831	„	„
Adel, near Leeds, Yorks.	1884	W. Kirkby	H. J. Wilkinson

**545. *Oenanthe phellandrium*,
Lamk.**

Ponds and ditches, Haddington, south-wards.

Distrib. Europe and Siberia.

	DATE.	COLLECTOR.	HERBARIUM.
<i>Sp.</i> Copgrove, Yorks.	1790	J. Dalton	Rev. J. Dalton
Scarboro' ,,	1813	S. Hailstone	S. Hailstone
York	1800	W. Middleton	W. Middleton
In the River Foss, Huntingdon, York	1881	H. J. Wilkinson	H. J. Wilkinson

546. *Æthusa cynapium*, Linn.

A weed in cultivated ground.

Distrib. Europe and Siberia.

	DATE.	COLLECTOR.	HERBARIUM.
<i>Sp.</i> York	1786	J. Dalton	Rev. J. Dalton
Heslington, Yorks.	1803	S. Hailstone	S. Hailstone
Strensall ,,	1806	W. Middleton	W. Middleton

547. *Silaus pratensis*, Besser.

Meadows, &c., from Fife to Kent.

Distrib. Finland to Hungary.

	DATE.	COLLECTOR.	HERBARIUM.
<i>Sp.</i> Coatham, N.E. Yorks.	1799	S. Hailstone	S. Hailstone
Copgrove ,,	1790	J. Dalton	Rev. J. Dalton
Gargrave, Skipton ,,	1806	S. Hailstone	S. Hailstone
Clifton Ings, York	1837	O. A. Moore	Moore

**548. *Meum athamanticum*,
Jacq.**

Alpine pastures, from Wales and York-shire to Aberdeen.

Distrib. Mountains of West Europe.

	DATE.	COLLECTOR.	HERBARIUM.
<i>Sp.</i> Westmoreland	1808	J. Dalton	Rev. J. Dalton
Braemar, Aberdeen... ..	1830	Dr. Greville	,,

	DATE.	COLLECTOR.	HERBARIUM.
549. <i>Ligusticum scoticum</i>, Linn.			
<i>Rocky coasts, Shetland to Northumberland.</i>			
<i>Distrib.</i> Europe (Arctic), from Denmark, southwards.			
<i>Sp.</i> Queensferry, Fifeshire	1809	W. J. Hooker	Rev. J. Dalton
550. <i>Angelica sylvestris</i>, Linn.			
<i>Damp copses and banks of streams, Shetland, southwards.</i>			
<i>Distrib.</i> Europe (Arctic), N. & W. Asia.			
<i>Sp.</i> Bottisham, Cambs.	1843	S. Hailstone	S. Hailstone
Copgrove, York	1791	J. Dalton	Rev. J. Dalton
551. <i>Peucedanum officinale</i>, Linn.			
<i>Salt marshes, Kent, Essex, &c.</i>			
<i>Distrib.</i> Belgium, southwards.			
<i>Sp.</i> Faversham, Kent	1838	D. Cooper	S. Hailstone
Whitstable ,,	1814	J. Dalton	Rev. J. Dalton
552. <i>Peucedanum palustre</i>, Möench.			
<i>Marshes, York, Lincoln, and Eastern Counties.</i>			
<i>Distrib.</i> Europe, Siberia, &c.			
<i>Sp.</i> Prickwillow, Cambs.	1800	Dr. Goodenough	Rev. J. Dalton
Beverley, Yorks.	1796	Col. Machell	„
Thorne Moor ,,	1840	O. A. Moore	O. A. Moore
553. <i>Peucedanum ostruthium</i>, Koch.			
<i>Moist meadows (Naturalized).</i>			
<i>Sp.</i> On the left of the road in a small field beyond Middleton, towards Manchester, Lancs.	1806	S. Hailstone	S. Hailstone
Hawes, Wensleydale, Yorks.	1840	J. Backhouse	„

	DATE.	COLLECTOR.	HERBARIUM.
554. Peucedanum sativum, Benth.			
<i>Roadsides & waste places (Wild parsnip).</i>			
<i>Distrib.</i> Europe, Siberia, &c.			
<i>Sp.</i> Near Lytham, Lancs.	1800	S. Hailstone	S. Hailstone
Newark, Notts.	1809	,,	,,
Bottisham, Cambs.	1813	,,	,,
Summer Castle, Lincolns.	1820	J. Dalton	Rev. J. Dalton
555. Heracleum sphondylium, Linn.			
<i>Moist woods and meadows, from Shetland to Channel Islands.</i>			
<i>Distrib.</i> Europe, N. Africa.			
<i>Sp.</i> York	1806	S. Hailstone	S. Hailstone
Copgrove, York	1790	J. Dalton	Rev. J. Dalton
556. Tordylium maximum, Linn. Alien.			
<i>Sp.</i> Oxford	1800	D. Turner	Rev. J. Dalton
557. Daucus carota, Linn.			
<i>Carrot. Fields, roadsides, &c.</i>			
<i>Sp.</i> Coatham, N.E. Yorks.	1799	S. Hailstone	S. Hailstone
Bramham Moor ,,	1840	,,	,,
558. Daucus gummifer, Lamk.			
<i>Sp.</i> Haslings, Sussex	1834	S. Hailstone, jun.	S. Hailstone
559. Caucalis latifolia, Linn.			
<i>Cornfields, Cambridge and Somerset.</i>			
<i>Distrib.</i> Belgium, southwards, N. & W. Asia.			
<i>Sp.</i> Somersetshire	1837	M. B. Ward	S. Hailstone

560. *Caucalis dauroides*, Linn*Chalky fields, Durham, Kent, Somerset.**Distrib.* Denmark, southward, N. Africa*Sp.* Tanfield, Yorks.

Cornfields, Hildenley Wood, Yorks...

In the hedge by the roadside near
the Inn at Barmby Moor, Yorks...

DATE.

COLLECTOR.

HERBARIUM.

1803

J. Dalton

Rev. J. Dalton

1809

W. Middleton

W. Middleton

1820

S. Hailstone

S. Hailstone

561. *Caucalis arvensis*, Huds.*Fields, waste places, from York, southwards.**Distrib.* Belgium, southward, N. Africa*Sp.* Cornfields, Ripon, Yorks.

Stetchworth, Cambs.

1800

W. Brunton

S. Hailstone

1839

S. Hailstone

,,

**562. *Caucalis anthriscus*,
Huds.***Hedges, waste places, from Caithness to
Channel Islands.**Distrib.* Europe, N. Africa, W. Asia.*Sp.* Copgrove, Yorks.

Horton, Bradford, Yorks.

1790

J. Dalton

Rev. J. Dalton

1809

S. Hailstone

S. Hailstone

563. *Caucalis nodosa*, Scop.*Dry banks, from Banff, southwards.**Distrib.* Denmark, southwards, West
Africa, W. Asia.*Sp.* Coatham, N.E. Yorks.

Heslington, York

Poppleton ,,

Copgrove, Yorks.

1799

S. Hailstone

S. Hailstone

1806

W. Middleton

W. Middleton

1881

H. J. Wilkinson

H. J. Wilkinson

1790

J. Dalton

Rev. J. Dalton

“WILLIAM ETTY,”

BY

MISS MOORE.

“WILLIAM ETTY.”

BY MISS MOORE.

IF we accept as unquestionable Carlyle's dictum that “Genius is an immense capacity for taking pains,” I think there ought to be no hesitation in assigning to William Etty a position amongst the great ones of the earth. That he did attain to distinction during his life-time we know from the fact of his election to the Royal Academy, and I think it cannot fail to be of interest to trace the steps by which a fellow citizen rose to what was to him the height of ambition, and the public recognition of his merit. He aimed high, and never allowed any hindrances or even apparent failure to turn him aside from his chosen path; his fixity of purpose, his definiteness of aim, his indomitable perseverance, and his untiring industry enabled him to carry through his self-appointed task. His purpose was to become a painter, his aim was at perfection of form and colour, and his perseverance and industry not only accomplished his own purpose, but stimulated and encouraged others.

William Etty was born on March 10th, 1787, at 20, Feasegate (now No. 8). His father, Matthew Etty (who was a native of Holme-on-Spalding Moor), was a miller and gingerbread maker. The mill he rented stood on the Mount, but has long since disappeared. The mother was Esther Calverley, daughter of William Calverley, of Hayton, and sister of Rudstone Calverley Rudstone, who succeeded a distant relative to the Hayton Estate. At the time of his marriage the painter's father was a miller at Hayton, but was turned out of the mill by the Squire, who disapproved of his sister's choice of a husband, and the Ettys went to live first at Pocklington, then at Eastrington, and finally in 1777 came to

York. The painter was the seventh child of a family of ten, of whom five died in infancy. The mother was a woman of superior intellect and decision of character, with some taste for design, which from lack of opportunity was not developed. She had also great business capacity, and her husband left in her hands the management of affairs. He seems to have been fairly well educated, but not brilliant, and with some sense of humour. In personal appearance, the painter resembled his father, being of a short, broad, and somewhat heavy build. The mother, according to Sir Thomas Lawrence, had the face of a Madonna.

The painter's first school was Mistress Mason's, in Feasegate, where he was sent at the age of three or four, then, from his eighth to his tenth year he was at the Bedern School under a Mr. Shepherd. He was a very quiet boy, shy and reserved, fond of drawing with anything he could get hold of, from a piece of coal to chalk, and on any available surface. At home he was gentle and affectionate, and devoted to his mother. There is no doubt that the surroundings of the boy had great influence on him, as we shall readily understand, if we try to realize what York must have looked like in his boyhood, before the days of jerry-builders and so-called improvements. The Minster, as yet untouched by fire or restoration, the old Gothic bridge with the beautiful Norman Chapel, the grey walls surrounding the city, the old churches, the beautiful lines of the old houses, the printseller's shops (photography as yet unknown), and the natural beauties which he always so keenly enjoyed, the river, the trees on the New Walk, and, not least, the gorgeous sunsets, all had their share in developing the artistic instincts of the boy. And, we know too, from his own words what an effect the windows of the Minster had upon him, he was never weary of gazing on their beauty, and speaks of them again and again in his letters down to the end of his life with an almost personal affection, and there can be little doubt of the influence they had in developing his sense of colour. Etty's parents were Methodists from conviction, but though at first he went to chapel with them he soon began to go from choice to the parish Church, or to the Minster, attracted no doubt by the music and the beautiful building.

The last two years of Etty's school-life were spent at Pocklington, at Mr. Hall's school, where he was a weekly boarder, finding himself in food. His grandmother Calverley was still living at Hayton, and on his visits to her he had the opportunity of seeing and admiring the fine old Hall, which was pulled down about twenty years later. On leaving Pocklington, Etty went to Hull, to be apprenticed to Peck, the printer, on the 8th of October, 1798, at the age of eleven-and-a-half years, and entered upon what proved to be a seven years' drudgery, even Sundays were in part work-days, for the "Hull Packet" came out on Mondays. He seems to have made no opposition to the arrangement though the purpose of his life remained unchanged, and every spare moment he had was devoted to drawing. Sometimes he would make on the wall a hasty sketch of a printer's bodkin, and then ask a fellow apprentice "to reach him that bodkin from the mantel." Before long, however, his elder brother, Walter, recognizing the genius in these rough sketches, arranged with Peck that the boy was to be free to follow his pursuit in his recreation time, and Etty was not slow to take advantage of such opportunities of self-culture as came within his reach. Though not yet free to practise himself seriously in his beloved art, the time of his apprenticeship was by no means wasted. The discipline alone was of immense advantage, and besides that he had the opportunity of gaining more book-knowledge than many painters ever possess, and this supplemented his scanty education, giving him that ease in writing and in speaking which in after life enabled him to write and lecture with much success. A collection of Etty's drawings of this period has been preserved by the son of a journeyman in the same office, named Walker. The subjects are much varied—objects, such as a pistol, a drum, a palette, a pewter pot, an open knife, or book, parts of the human figure—then again scenes he had witnessed, two chimney sweeps fighting, a pan of milk spilled by a donkey that was carrying it; scenes at the office, or again fanciful sketches; a sailor in a blue jacket and pigtail capering on shore, holding aloft his cap and cutlass on occasion of the Peace (1801), another blue-jacket leaning against a tree looking on; the "death of Bonaparte," bayoneted by two English

soldiers, and so on. Then came the present from a sailor brother of his first box of water-colours, which he ground up in oil, and began to work in this new medium. One of his earliest oil pictures was "A Country Church," painted on a piece of tin, about six inches square, another "A Soldier on Horseback," on a piece of brown paper about a foot square.

It speaks much for the honesty which was a distinguishing characteristic of Etty, that he faithfully served his time at Hull, though the longing to be free was at times almost intolerable. He missed too the beauties of his native town, though there were at that time some few remains of the old town of Hull still standing. At length the long wished for day of release dawned, and on October 23rd, 1805, at noon, Etty received what he always valued as his chief testimonial of honour, the endorsement of his indentures, recording that they had been faithfully fulfilled to the satisfaction of the master, and the credit of the apprentice. For three weeks after the great event Etty worked as a journeyman printer, anxiously awaiting a summons to London. He had written to his uncle, a gold-lace merchant, of the firm of Bodley, Etty, and Bodley, begging his assistance. The uncle hesitated, and Etty wrote again and again. Finally, by the advice of the junior partner, the boy was summoned to London, and speedily convinced his uncle of his powers; he was "made at home" at his uncle's, and "furnished with cash" by his brother, and so the great City drew to itself one more aspirant for fame.

It was no light task to make up the seven years of his apprenticeship, but Etty was in earnest, and never allowed himself to be discouraged by the knowledge that he was so far behind-hand in the technicalities of his art. He worked hard for a year, drawing everything he could get hold of, from prints or nature, or from casts, in the shop kept by Gianelli, near Smithfield, till a drawing of "Cupid and Psyche" from the Antique, was considered good enough to be taken to Opie, to whom Etty had an introduction from Mr. Sharp, member for Hull. Opie passed him on to Fuseli, Keeper of the Academy, and by him Etty was admitted as student on January 15th, 1807. Etty's fellow students at that time, who nearly all became well-known painters long before he developed

his full powers were, Collins, Jackson (Lastingham) Haydon, Hilton, Wilkie, Mulready, Leslie, Constable, Bailey, and others, some of whom were already exhibiting. Before Etty had had any opportunity of proving his capacities he had thought to paint landscape; he explained "the sky was so beautiful, and the effects of light and cloud," and then in a few simple words he unfolds his great purpose. "When I found that all the great painters of Antiquity had become thus great through painting great actions, and the human form, I resolved to do nothing else. And finding God's most glorious work to be Woman, that all human beauty had been concentrated in her, I resolved to dedicate myself to painting—not the draper's or milliner's work, but God's most glorious work, more finely than ever had been done." In order fully to appreciate Etty's achievements we must re-call to our minds the condition of art at the beginning of the nineteenth century. There were few worthy successors of Hogarth, Reynolds, Gainsborough, and Romney. Cosway, Flaxman, Fuseli, Stothard, Smirke, and Turner stood out from the rest, but there was nothing in their style akin to Etty's genius; Lawrence, the portrait painter, was the only living artist with whom he was at all in sympathy in the early days of his studentship, and, through the liberality of his uncle, Lawrence agreed to take the youth as his pupil for one year, on prepayment of a hundred guineas. Etty was allowed to copy pictures in Lawrence's studio, and ask his master's advice when he was at liberty to attend to him. As a matter of fact the vacant moments were so few that the student had to struggle on almost unaided, and after a time well-nigh in despair, but his indomitable perseverance enabled him to achieve his purpose, and at length he could copy not only Lawrence, but the old masters with comparative ease, though this improved power in handling was his only gain in the year's labour. He caught something of Lawrence's mannerisms, but these disappeared as his own natural powers developed. He then resumed his former studies at the British Gallery from the Old Masters, from nature—heads in the day, the figure in the evening—never failing at his post in the Academy Life-School. He occasionally made copies for

Lawrence, but the work was not congenial; he preferred, as he says, "to think for himself."

In 1809 Etty's kind uncle died, leaving him, however, a handsome legacy, which was of great service, for he had now to find a home for himself. His brother continued to help him when necessary, though it was many years before Etty was able to re-pay the money so generously supplied. He worked more strenuously than ever, but at first had no success in competition for medals, and once again almost gave up in despair, but with renewed resolution set to work again to master the technicalities in which he found himself deficient. He drew from the skeleton, continued his studies from the Antique and at the Life School, working early and late, till after six years' regular study his first picture was accepted and hung at the Academy in 1811, *Telemachus rescues the Princess Antiope from the wild boar*. A smaller one, entitled *Sappho*, was hung the same year at the British Institution, and sold for twenty-five guineas. No contemporary criticism is extant on these exhibits, but his early pictures have been described as "black and colourless attempts at ideal subjects." His genius ripened slowly, handicapped by lack of early training. From that time he continued to exhibit regularly, but without attracting much attention, adding portraits to his "studies" a year or two later, but all of small size, 3ft. by 2ft. 9in., 2ft. by 2ft. 5in. In 1816, Etty paid his first visit to the Continent, intending to stay a year in Italy to study, but he was away only three months. He was not in good health, and was besides so terribly home-sick that he was quite unfit for work. He wrote very interesting accounts of his experiences on the journey, by way of Rouen and Paris to Switzerland, and thence into Italy, and despite the many inconveniences and discomforts of the journey this artist eye delighted in the beautiful scenery and glorious effects of colour. He got as far as Florence, and there suddenly resolved to go back, leaving Rome and Naples unseen. He worked a little at Florence and Milan, and again a little more in Paris, and then returned to London, where he settled down to hard work, gaining ground slowly but surely, painting chiefly classical subjects. In the Autumn of 1818, at the age of thirty-one, he

competed for the medal at the school of painting, and distanced all competitors by his copy of Titian's *Ganymede*, but for some alleged infringement of the rules it was disqualified, though the Academy paid him great compliments on his work. Soon after this first triumph Etty's father died, leaving property to the amount of about £900 to his widow.

The first picture of Etty's which gained any notice from the critics was a small finished sketch of *Pandora, formed by Vulcan, and crowned by the Seasons* (the finished picture 4ft. by 4ft. 9in. was exhibited in 1824, and is now in the Corporation Art Gallery at Birmingham). The sketch was exhibited at the British Institution, and followed in the same year, 1820, at the Royal Academy by the first free expression of his original genius, the *Coral Finders, Venus and her youthful satellites arriving at the Isle of Paphos*, described as a most poetic achievement. It sold at once for £30. After the painter's death it was sold at Christie's for £370. At that time Etty was living in Surrey Street, Strand, but removed soon after to No. 16, Stangate Walk, Westminster Bridge, still near the river, and there he remained five years.

The year 1821 saw the completion of the "Cleopatra," of which Leslie speaks as that "splendid composition" which was the revelation of Etty's true genius. It was a most ambitious picture, an attempt to pourtray on canvass the glowing words of Plutarch on "Cleopatra's Arrrival in Cilicia." "She sailed along the river Cydnus in a magnificent galley. The stern was covered with gold. The sails were of purple, and the oars of silver. These in their motion kept time to the music of flutes and pipes and harps. The Queen, in the dress and character of Venus, lay under a canopy embroidered with gold; while boys, like painted Cupids, stood fanning her, on each side of the sofa. Her maids, habited like the Nereides and the Graces, assisted in the steerage and conduct of the vessel. The fragrance of incense, vast quantities of which were burnt on the deck, was diffused along the shores, which were covered with multitudes of people."

The picture was bought by Sir Francis Freeling, it is said for £200, but there is reason to believe the actual payment was less. After the death of the painter £1,000 was paid for it by

Mr. Labouchère. A number of small pictures followed, chiefly fanciful in design, but very carefully finished. In 1822, Etty once more started for Italy, intending to make a stay of six months, which was eventually extended to two years. This time he was able to see the galleries of the Louvre, which had been closed on his earlier visit, and was deeply impressed with the almost overpowering magnificence of the building and its priceless contents, Rubens and the painters of the Venetian School arousing his most keen admiration. After a short stay in Paris, he continued his journey with halts at Geneva, Milan, and Florence, and at length after enduring much discomfort arrived at Rome on the 15th of August, perhaps the worst season of the year for an Englishman, but he was determined not to fail this time, "even," he says, "should it cost me my life." His letters, especially those to Sir Thomas Lawrence, give vivid and interesting accounts of his visits to the sights of Rome. He was so truly an artist that beauty of every kind appealed to him, whether of colour, form, proportion or sound; he admired the paintings of Michael Angelo and Raphael, the sculptures in the Vatican, the vast cathedral of S. Peter, and the beautiful music, not forgetting too, the beauties of nature. He went about with his friend Bonomi, and spent some time in sketching from Michael Angelo. He next visited Naples, and stayed three weeks, sight-seeing and drawing industriously at the Museum from the Antiques of Herculaneum and Pompeii. He also made the ascent of Vesuvius, visited the beautiful Bay of Baïæ, and explored the excavations at Herculaneum and Pompeii. He then returned to Rome and set to work in good earnest, studying, copying, sight-seeing, and enjoying the society of his fellow-countrymen, among whom were Severn (the friend of Keats), Kirkup, Eastlake, and others. His stay was not long, by the end of October he was again moving, intending to go straight home, but eventually stopping at Venice. As on the occasion of his first foreign trip, Etty was suffering from love-sickness. He had an artist's impressionable nature, but was not successful in his love-making, his somewhat uncouth and slovenly appearance did not commend itself to those who could not discern the real man under the rough exterior. He suffered acutely till

suspense was over, and he knew the worst, then he quickly made up his mind to his fate, and devoted himself once more to his beloved Art, and after a time was even able to write of his troubles in quaintly humorous fashion to his friend Bodley, "I have been so often and unprofitably in love, I have serious thoughts of paying my addresses to my Tea-Kettle. I have found her a very warm friend. She sings, too. And you know how fond I am of music. I have heard a thousand tunes more unpleasant than hers. On a winter's night, after a well-spent day, with a volume of old poetry, Shakspeare, Milton, Spenser,—a volume of Dr. Johnson, or a new Scottish novel, when the wind is blowing, and pattering the rain against one's window, then, sweet is the song of the Kettle; sweeter to a studious man, than a crying child or scolding wife. However, I must consider seriously before I offer her my hand, lest she should burn it." Etty was almost as much addicted to tea-drinking as Dr. Johnson, and invariably carried tea with him on his travels.

His stay in Venice lasted more than a year, during the whole of which time he worked unceasingly, studying at the Academy, copying from pictures in the Gallery, and in the intervals seeing the sights of Venice. He astonished the Italians by the rapidity of his execution, and by his fine copies of the great masters, they declared that he painted with the fury of a devil, and the sweetness of an angel. He literally gloried in the gorgeous colouring of Titian, Tintoretto, and Veronese, and never rested till he had completed the number of copies he originally designed to make, thirty studies in oil after the Venetian School, and twenty in oil of Academic figures. Of the thirty copies, thirteen were from Veronese, nine from Tintoretto, three from Titian, two from Bonifazio. To Etty in after years they were invaluable, and he never forgot that he owed them to the generous liberality of his brother Walter, who, anxious for the painter's improvement, continued to supply him with funds. His next ambition was to secure a copy of Titian's Venus, at Florence, which after much difficulty he was able to accomplish, of the size of the original. He sent it to England by sea, insuring it for £100. In later life he used to insure it for £200 and £300. From

Florence he returned to Venice, stayed two months and then started for England with his precious studies, the cause of many disputes at the different custom-houses. However, British determination prevailed, and in the end the pictures were safely passed. After a short stay in Paris for further study he returned to London, and at once began a picture for the Academy, the "Pandora" already mentioned, bought by Sir Thomas Lawrence. In the summer of this year (1824), Etty made his last move in London to Buckingham Street, Strand. His mother went to help him, taking with her the niece, who for the next twenty-five years was Etty's "Right-Hand." On October, the 29th, Etty was elected Associate of the Royal Academy, at the age of thirty-seven.

He now began to work on the first of the "Three Times Three" colossal historical pictures, which it was his ambition to paint. It is called "The Combat, or Woman interceding for the Vanquished." It was exhibited at the Academy, and universally admired. The price Etty put on it was three hundred guineas, at which it was bought by Martin, the painter.

In the autumn of 1825, Etty after a long absence paid a visit to his native city, and began to show that active interest in the preservation of its antiquities, for which we owe him a great debt of gratitude, coupled with a feeling of regret that the example he set should not have been continuously followed. His indignation was first roused by hearing that the County had purchased Clifford's Tower, and the beautiful site on which it stood, for the purpose of enlarging the prisons of the Castle. He at once bestirred himself in the matter, with the result that "the Tower was not actually pulled down, only *stifled* as it were, amid a huge and hideous array of Castellated prison-walls, enclosing the Castle precincts."

The spirit of Vandalism which thus roused the painter was literally rampant during the first half of the nineteenth century, and can scarcely be described as dormant at the present time. It sounds like a veritable death-roll to read of one relic of the past after another, "taken down, so and so," in some instances leaving no trace behind, not even preserved in prints; for example, the Skeldergate Postern. Truly the

city fathers have played the part of step-fathers, and we have still to deplore that the example thus set has been only too closely followed. Were it not well to require that each candidate for municipal election should pledge himself to *preserve*, and not to *destroy*, the antiquities of our city. Such a policy of destruction, under the guise of "improvement," is eminently short-sighted, for if all that attracts strangers to the city is demolished, there will no longer be anything to distinguish York from modern towns, and business must necessarily suffer.

From the year 1825, Etty's visits to York became more and more frequent till they grew to be an annual event, and he had either a permanent lodging or a house. He lived at different times on the Mount, in Gillygate, in Marygate (in a cottage near the river), in Gray's Court, in Strickland's Court (Blake Street), finally at S. Martin's House, Coney Street, which he bought in order to be near his beloved river, and from whence he loved to watch the gorgeous sunsets, which are still one of the sights of York.

On February 19th, 1828, Etty was elected R.A. It was always with him a subject of just pride that he was elected solely on the score of merit, and he maintained that such elections should be the rule. He was chosen in place of Flaxman, whom he greatly admired, and who by a curious coincidence was born at York, though not brought up here. The newly-chosen R.A. was not indifferent to the hardly-won honour, the delight with which he announced the great news to his relations and friends was genuine and almost boyish in its hilarity, he had reached one of the highest pinnacles of his ambition, the recognition of his abilities.

It may be well to give here some account of the great "Three Times Three" historical pictures, partly because of the devotion of the painter to his self-imposed task, and partly because his election was directly owing to the first of the series, the *Combat*, which has already been mentioned, measuring in height 10ft. 4in., and in width 13ft. 3in. The next was *Judith and Holofernes*, the scene depicted from the words "Then came she to the pillar of the bed, which was at Holofernes' head, and took down his falchion from thence.

And approached to his bed, and took hold of the hair of his head, and said, 'Strengthen me O Lord God of Israel.''' (Judith xiii, 5, 6). This was painted in 1827, and exhibited at the Royal Academy and at the British Institution. The size is 11ft. 10in. by 15ft. It was eventually purchased for 500 guineas by the Council of the Scottish Academy, with its pendants, *Judith with the head of Holofernes*, 1830, and *The Maid of Judith waiting outside the tent of Holofernes*, 1831. The fifth, *Benaiah, one of David's chief captains* (12ft. by 14ft.), had been painted in 1829. This and the *Combat* were also purchased by the Scottish Academy, the latter from Mr. Martin at the original price, and the *Benaiah* for 130 guineas, including a costly frame. The whole series now hang in the Dome room of the Scottish Academy at Edinburgh. The sixth colossal picture was *Ulysses and the Sirens*, 14ft. 6in. by about 10ft. high, containing twenty figures, begun in 1836, exhibited the following year at the Academy, and sold along with *Delilah* for the sum of £250 to a Mr. Grant, of Manchester, and eventually presented by his brother to the Manchester Institution where it still remains. The other three large pictures were exhibited in 1847, three scenes from the history of Joan of Arc, the first in the church of St. Catherine de Fierbois, where she finds the sword—the second, making a Sortie from the Gates of Orleans; and the third, the Martyrdom at Rouen. The three were sold for £2,500.

Each picture was designed by the painter to exhibit some virtue or moral quality. The *Combat* illustrating mercy—the *Benaiah*, courage—the *Sirens*, control of the passions—the *Judiths*, patriotism and self-sacrifice to one's country, one's people, and one's God—the *Joan of Arc*, religion, loyalty, and faith. The labour bestowed on them was immense, the preparation long and careful, and the completion taxed Etty's failing powers severely. After his election to the Academy he still continued his regular attendance at the Life School, no doubt greatly to his own benefit, and at the same time affording an encouraging example to the younger students. It was in this same year, 1828, that the proposal was first made to remove the York City Walls, which roused not only Etty, but his friends, Professor Phillips, Mr. Wellbeloved, Dr.

Atkinson, and Mr. Brook to take active measures for their preservation. A York Association for the Preservation of Footpaths was formed, Etty wrote to all the local papers, his friend, Sidney Taylor, brought the matter forward in the *London Herald*, the ladies of York took up the matter, and a subscription of £3,000 was raised, including a handsome sum from another Yorkshireman, Sir Francis Chantrey. Valuable help was also given by the Yorkshire Philosophical Society, then in its infancy, which had done itself and Etty the honour of electing him Honorary Member. With the sum thus provided the Micklegate Walls were restored, and a small portion of the Walmgate Walls, the Corporation voting a grant of £100. But they were only checked. Not content with having in 1820 mutilated the Barbicans of Micklegate, Monk, and Walmgate Bars, they had altogether removed the Micklegate Barbican in 1826, in spite of protests from Flaxman, Stothard, and Sir Walter Scott, and in 1831 passed a resolution to take down Bootham Bar. Etty once more came to the rescue, promised a subscription, which he could ill afford; £300 was raised, and the Bar was saved, but the Barbican was destroyed. One side of the Bar dating from the time of Charles II. was pulled down and put up like the other!

Another controversy about the walls occurred in 1839, on the occasion of the introduction of the Railway. The Bill had been passed unknown to Etty, and his distress at the sight of the breach was very great. Through his efforts the Corporation was induced to devote £500 of the compensation received from the Railway Company towards the restoration of the Walmgate Walls, and eventually, with the help of subscriptions, of the Walmgate Barbican. Another matter in which Etty played an important part was the restoration of the Minster after the fire of 1829. A very large subscription was raised, £60,000, more than enough to re-place what had been destroyed, and the Dean and Chapter proposed to set back the Organ Screen in order to uncover the bases of the pillars supporting the Central Tower; it would have been necessary to reduce the Screen both in length and height, and moreover it was afterwards admitted, that once taken down,

it could not have been set up again. The subscribers objected to such mutilation, Etty threw his whole weight into the scale against the scheme, writing indignant letters to the papers, calling meetings, and using all his eloquence to avert the threatened disfigurement of his beloved Minster. Finally, the Dean and Chapter yielded to the wishes of the majority of the subscribers, and the counsel of Archbishop Harcourt "to cultivate peace, rather than gratify taste!" In the endeavour to save the buildings near the Minster, Etty was less successful, the whole of the old surroundings have been swept away, with the exception of those at the East end, and the College Street entrance to the Close. Trinity Gateway, too, he could not save, but he did succeed in saving the Strays.

The second fire at the Minster in 1840 was a crushing blow to the painter, and for three whole days he was unable to work at his pictures. Then he roused himself, and with renewed energy did what he could for the restoration. He came to York in June, held meetings, which he addressed in the most moving terms, gave a stirring lecture in the Museum on "English Cathedrals," and set the example of a liberal subscription.

York owes to Etty the establishment of the School of Art, or School of Design as it was originally called. The suggestion was first made in 1838, and a paper read by him in the Museum on the "Importance of the Arts of Design." It was then proposed to use the Hospitium, but that was not found practicable, and it was not till 1842 that the School was opened in the building erected for it on the south side of the Minster, on the site of the Old Deanery. Etty gave valuable help in the arrangements of the School, and delivered an address at the opening in which he exhorted the students to "industry, patient, persevering, and untiring; throwing overboard as useless, or worse—mischievous,—all vain notions of themselves, fostered perhaps by injudicious friends, that they were geniuses." He also told them "to study with accuracy and care the various objects of Art in the school, but also the varied forms and colour which nature presents; the beauty of plumage in birds, the colours and shapes of shells, flowers, and plants, both wild and cultivated, to try to express these with a

pure, accurate and clear *outline*, the first essential, without it, the best colouring is almost a nonentity.

He offered an annual premium of two guineas for a design for stained glass, and his brother, Captain Etty, also offered the same amount for "the best drawing or painting in body colours, of the wild flowers, weeds, and grasses of an English hedge bottom, done accurately from the objects in arrangement as well as in detail." In the lecture of 1838, Etty expressed himself very strongly on the wholesale destruction of the old buildings of York. He says, "While one stone remains on another of old York I shall love her. But when such awful slices are carved out of her, I feel as Churchill said he felt when he had to alter his poems, 'It is like cutting away my own flesh!'" I have noticed a practice which I feel sure he would have deprecated, that of removing the tracery of the fan-lights over the street doors, and substituting a single pane of glass, which produces a very bare effect, though it may give more light.

At the age of fifty-two we learn that the painter on his visit to York took lessons in perspective from Mr. Moore (the late Mr. Edwin Moore), and again in the following year. This branch of study had been somewhat neglected by him as by other artists, and his taking it up so late in the day is a fresh instance of his perseverance and humility, for his teacher was quite a young man.

In 1836 there was an exhibition in York, at which some of Etty's characteristic works were shown, two, *Adam and Eve*, and *Mars, Venus, and Cupid* appeared for the first time, and before the close he also sent *The Family of the Forests*, purchased by his friend, Mr. Harper, the architect of St. Peter's School, for £50, and afterwards sold for £350. Etty's prices till quite late in life were very small, not till the last six or eight years of his life did he begin to reap the substantial reward of his labours which enabled him after repaying his brother, to lay by enough to secure his long wished-for home in York, whither he removed in 1848. Before that time he had paid more visits to the Continent, but it was not till 1840 that he was able to make his long-cherished pilgrimage to the land of Rubens, his best beloved master, whose works he had

hitherto chiefly studied in Paris. The trip only lasted ten days, and was followed by another the following year; the next trip was to France to make studies for the Joan of Arc series. At the Academy, Etty continued his attendances at the Life School up to the last, even when suffering acutely from asthma, and when he settled down in York to enjoy his hardly-earned rest he still continued to paint as long as he could hold a brush. Like other successful painters he was constantly being applied to for advice and help by young students, which he always tried to give, sometimes accompanied by the present of a drawing. While in London he kept open house on Tuesdays, in early days beginning with breakfast, but that was given up latterly as being too exciting. Fuseli, Flaxman, Stothard, Constable, Hilton, Maclise, Dyce and Herbert, and many others, with Turner, were always welcome guests.

The year after his retirement to York an exhibition of his paintings was held in London, at which he was anxious to have as representative a collection as possible, though from one cause or another some of his favourites could not be shown. He personally superintended the arrangement and hanging of the pictures, thereby securing a well-contrived concord of the whole, equalling the splendour of the individual works. It was a great triumph, and at once established Etty's fame on a footing it had never before attained, and extended a knowledge of the Poetic Colourist alike to those who had known nothing and those who had seen only a few of his works. He stayed in London till the exhibition closed, visiting it nearly every day, and attending the Life School till the end of the session. He waited to superintend the packing and removal of his beloved pictures, taking silent leave of them with tears in his eyes, and then came back to York, on September 29th, broken in health, though still able to totter about the familiar scenes and paint at times. The end came on November 13th, after a final illness of ten days from congestion of the lungs.

It had always been his wish to be buried in the Minster, he had often spoken of it, and had sometimes thought of a picture from his own hand as his monument. His reasons are touchingly expressed in a letter to his friend Mr. John Bulmer, written from a sick bed, he says:—"Lay me by my Bride; she who is so lovely to mine eyes, so dear to my heart, captivating to my imagination; whose brow is bound round with rubies, with sapphires, with amethysts, with emeralds;

who lifts her head into the heavens, and seems a fitting ante-chamber thereto. To drop metaphoric flights"—he continues—"it is difficult for me to speak coldly on the subject, lay me near the Choir of the Minster, in or as near to the little South Transept (which is near the flight of steps to the altar), as is possible. My desire to be buried in the Minster of York is not, I am desirous to believe, from ostentation, but from the true love I bear that glorious, that holy work, that splendid monument of the piety and power of the past ages; when the House of God was thought worthy of all the perfection that man could give it." His wish was not carried out. He had left no directions in his will, and made no provision for the sum it would cost, £500. No one seems to have come forward with a proposal to grant the honour to his remains, and so he was laid, as we know, in S. Olave's churchyard, near to the ruins of the once glorious Abbey. The funeral was a public one, attended by the Lord Mayor and Corporation, and the School of Design, as well as by a large number of friends and fellow-citizens. The grave, as Professor Phillips informed Etty's biographer, was a Roman one, and a small earthenware vase was found in it, which was presented to Professor Phillips. Beyond the tombstone, and one light of a window in the north aisle of S. Olave's Church, there are, I believe, no public memorials of Etty in his native city. Of his art, it has not been my intention to do more than give a general idea; he has been called an anachronism, he drew his inspiration from the Past, he was to a great extent his own master, and he founded no school. His pictures, besides those already mentioned, and some in the National Gallery and in the South Kensington Museum, are mostly in private collections. Some of his best portraits are in York. The one of Mr. James Atkinson, belonging to the Yorkshire Philosophical Society, is, I believe, considered his finest work of the kind.

In bringing to a conclusion what I cannot but feel is a very imperfect sketch of a great man, I would earnestly impress on the citizens of York the noble example he set in reverent care for his native city, and trust, that recognising the inestimable value of the glorious heritage they have received from the past, while mindful of the needs of the present, they will not ignore the claims of posterity, and constantly endeavour to preserve from destruction and decay the priceless historic treasures of our ancient city.

The Hospital of St. Peter, York.

By GEO. BENSON.

THE Hospital of St. Peter owes its foundation to King Athelstan, who, returning from the famous battle of Brunnanburgh, came to York and returned thanks to God in the Minster for his great victory. He observed in the Minster some poor religious people called Culdees devoted to works of charity, and on enquiry found their work was greatly hindered owing to want of means; so the King granted to God, St. Peter, and the Culdees, a piece of ground on which they might erect a hospital, and added for the support of it one thrave of corn out of each plough going in the See of York. The piece of ground which Athelstan granted to the Culdees of the Minster is that on which the Theatre Royal stands. On the site buildings were erected, probably of timber, for the Hospital. The sheaves of corn were part of the King's income from this district, the taxes and customary payments were made in kind and at York there would be the King's granary in which to store them. It is stated the King received these thraves in recompense for his destruction of wolves in the district, and that he had twenty sheaves of corn out of each plough-land to maintain his hounds.

At York Athelstan coined silver pennies, the reverse of some have a rude representation of the Minster front.

The timber buildings for the Hospital would be destroyed in the great fire of 1069 which devoured the Minster Library and damaged the Minster.

Thomas of Bayeux, when he became Archbishop of York, restored the Minster, and seems to have rebuilt the Hospital with stone. He induced William the Conqueror to give them some land on the western side of their Hospital, and also got the King to confirm the gift of the thraves of corn. The good deeds of the Culdees were recognised. When the Conqueror

in his revenge had laid waste the land in this district and the north, a great famine arose, but the Culdees, out of their revenues, did many good deeds to the poor, by reason of which many rich and noble men gave them lands, possessions, and money.

King William II. enlarged the site of St. Peter's Hospital. From the hospital or almshouse for the poor on the King's Waste it now stretched to the King's Place where, as late as the time of Henry V., there were many houses standing which were anciently employed to the King's use. William II. built a church for the Hospital and dedicated it to St. Peter.

The Close of the establishment was extended to the banks of the river by King Henry I., who also gave a common in Galtres Forest with pasture for all their cattle, wood to burn, and timber for building.

King Stephen at his own charge built a church for the Hospital on the part of their close adjoining the King's Street. The church was dedicated to St. Leonard, and the King also changed the name of the Hospital from St. Peter to St. Leonard. From this time, the Hospital under royal patronage became independent of the Minster.

The Hospital was surrendered on December 1st, 1539. The buildings and site passed through various hands until 1675, when these were bought by the Corporation for £800. In 1750, Joseph Baker leased the buildings of St. Peter's Hospital and erected a small theatre. Fifteen years later it was extended. In 1807, that part of the cloister sketched by Joseph Halfpenny and published in his "*Fragmenta Vetusta*," was perfect and remained so till about 1835, when it was cut through for a new staircase to the boxes of the theatre from the newly formed street of St. Leonards.

Some fourteen years ago the Corporation, in making alterations, destroyed the greater part of the cloister, and last December saw all the remains cleared away, except one bay, which will be preserved. A column, including base and cap is now in the cloisters of St. Leonards.

The cloister or undercroft of St. Peter's Hospital is of Norman work, plain pointed arches of worked stone spring from the scalloped capitals of columns and wall piers enclosing

a square area, and this space within four arches is covered with rubble work, having plain diagonal groins intersecting each other and rising to a keystone in the centre 13 ft. 8 in. from floor. The north wall is 2 ft. 5 in. in thickness, and is built of rubble in mortar, faced both sides with worked stone 7 in. deep and 12 in. high, and about 14 in. long, with $\frac{1}{2}$ in. joints. A few deep red bricks, 10 $\frac{1}{2}$ in. by 5 in. by 2 in., were embedded in the rubble. The exterior of the wall was strengthened by bold buttresses 4 ft. wide and projecting above 3 ft., and having on the face a set-off formed with a 4 in. chamfer, some 10 ft. above ground. Views of the three wall pilasters on the interior are given, taken from photographs by Mr. Watson.

The part sketched by Halfpenny consisted of two aisles divided by a row of five short columns, opposite to which are flat pilasters to the walls. This apartment running north to south, was 81 ft. 6 in. in length, and about 26 ft. wide. The long eastern side and the southern side were filled in between the pilasters, indicating a continuance beyond. On the eastern side a portion has been revealed by the excavations and shows the cloister extended that way 26 ft. and southerly for 40 ft. 6 in., and thus in form 'L' shaped. This portion may have continued southwards, but any trace of continuance would be removed if it was the site of the small theatre of 1750. It is possible that the cloister was one apartment seven bays in length, and four in breadth, if so, it would have an internal length of 96 ft. with a width of 53 ft., and its eighteen columns and square piers would give it a sturdy appearance. There is a large quantity of old limestone re-used in the house at the corner of St. Leonards and Duncombe Street, which was no doubt taken from the Hospital of St. Peter.

Fragments of early wall shaft bases have been found, one is identical with that figured by John Browne in his great work on York Minster, Plate III., figure 5, and given as the profile of some bases. This shows a close connection between the Minster and the Hospital. These fragments may be remains of wall arcading to the upper floor.

The Chapel would be on the upper floor, a couple of carved stones were revealed which may have belonged to the Chapel, one seemingly an arch stone has the chevron ornament, whilst

the other with sunk star and bead between may be part of a string course, see Plate III. Many ecclesiastical buildings were of two stories; two in York remain, St. Leonard's Hospital and the Archbishop's Chapel, now the Minster Library. Of secular buildings, the Chapel in Clifford's Tower is on the upper floor, over the entrance.

The Well of the Hospital of St. Peter was originally in the grounds on the eastern side of the cloister, now it is on the stage of the Theatre Royal. It is oval in shape, 2 ft. by 2 ft. 6 in., built of magnesian limestone in courses varying from 7 to 11 in. deep, for a depth of 15 ft. 6 in. The deepest stone course is chamfered, and rests on a timber foundation, the timbers are 12 in. deep in layers and enclose a square 2 ft. 10 in. to a depth of 10 ft. 6 in. The Well was cleared, but nothing of interest was revealed.

On Plate I. is a plan of the Hospital, the dotted line indicating what may have been its original extent. The letters A, B, and C, refer to the wall pilasters, of which views are given on Plate IV. The section is from west to east and gives two vaulted bays, wall pilaster C, opening in east wall, and position of Well outside the building.

Towards the street is shown the Lodge, having the lower apartment, 16 ft. 10 in. wide, covered with a segmental barrel vault rising 7 ft. 3 in. at centre above its springing from a chamfered string course. The vaulting was divided into bays 11 ft. apart by a chamfered arch or arches rising from corbels forming a continuation of the chamfered string course. In the centre of north wall is a chamfered window with flat head having an exterior opening 12 in. wide by 2 ft. 6 in. high. In the exterior wall on west side and on the upper floor is the head and one side of a lancet light.

Plate II. is a section from north to south showing buttress and one vaulted bay of the Hospital cloister. In plate III. are profiles of bases, each 7 in. high; the one to the left is identical with some early bases at the Minster, that to the right is a column base. The two carved stones are referred to on page 100. Three mason's marks are shown, two, A and B, from wall shaft C, and the other from a column, may be the wall column shown on plan opposite the one marked C.

FURTHER REPORT ON THE
EXCAVATION
OF THE
CHANCEL OF S. MARY'S ABBEY CHURCH.
BY W. H. BRIERLEY.

THE excavation of the Choir of S. Mary's Abbey Church has been steadily pushed forward during the past year, and has now reached an interesting stage. The north aisle (Pl. V. AA) has been completely exposed, the north wall (BB) and the east wall (CC) of the north transept (DD) have been bared. The fragments of moulded stone from an earlier church built into the foundation of these walls are of great interest. On the south side of the north aisle, the excavation has exposed the foundations of a wall that has evidently at some time formed the outer wall (EE) of an earlier chancel. Stow and Gervase of Canterbury, record a great conflagration as occurring about the middle of the 12th century, and mention S. Mary's Abbey Church amongst the buildings injured. Mr. Wellbeloved considers that any injury then sustained must have been of a slight character, and Canon Raine endorses this assertion. But it seems probable from the evidence afforded by the excavated foundations that the chancel was rebuilt, and that the wall last referred to was its outer wall. If so, the chroniclers are not without good warrant for their statement. Still more interesting is the discovery of the foundation of an apsidal end of a side chapel, or an aisle, belonging to a still earlier building—probably the church of which Rufus laid the foundation stone. A further

excavation may perhaps reveal traces of the apsidal end of an early Norman choir. The results of the excavation so far carried out are certainly such as to encourage us to proceed with the task of completely clearing as much of the choir as lies in our property.

The interior side of the east wall (FF) has also been cleared, and a pit made at the N.E. angle (G) to shew the depth of the foundation, which is unusually great.

It should be added that with one or two trivial exceptions, the wall stumps have been left as they were found; only as much cement has been used as is necessary to keep the stones together. Wherever a stone has been inserted, the date 1901 has been cut in the face of it.

Plate V. will give the reader a summary of the results so far obtained in the course of the excavations.



GENERAL NOTES.

DURING this year the foundations for the new N.E.R. Offices were completed. This necessitated the excavation of 3,000 square yards of the ground between Tanner Row and Tanner's Moat, the site of Scawin's Hotel and some adjacent buildings. This area was dug out to an average depth of 14 to $27\frac{1}{2}$ ft. below the road level. The nature, and the results, of this excavation will be best understood by reference to Plate VI., which is a re-production of a drawing kindly presented to the Society by Mr. Thomas Bell, the Architect of the new buildings. On the whole, the excavation was disappointing from an archæological point of view. The objects found, Anglian and Roman, were mostly very imperfect, by no means numerous, and of quite ordinary type. A good many piles were found, bearing testimony to the marshy nature of the ground in past times. All objects of antiquity found were carefully preserved by those in charge of the work, who took a most intelligent interest in them.

The most interesting discovery during 1901 was that of a Roman stone coffin found in Sycamore Terrace about 1 ft. 6 in. from the wall on the S.W. side of Love Lane and half-way between the end of Bootham Terrace and that of Queen Anne's Road. The coffin lay almost North and South, with the head to the North, the lid was little over 1 ft. from the surface. Inside were the bones of a young woman, who had (as usual) been buried with her ornaments. The objects found in the coffin were as follows:—two jet bracelets, 3 in. by $\frac{1}{4}$ in. by $\frac{5}{16}$ in., and $3\frac{1}{8}$ in. by $\frac{1}{4}$ in. by $\frac{1}{4}$ in.; a bone bracelet, $3\frac{1}{4}$ in. by $\frac{3}{16}$ in. by $\frac{1}{8}$ in., and fragments of at least four other bone bracelets; two fragmentary bronze bracelets; two locket, one silver and the other bronze, $\frac{5}{8}$ in. diameter; two beads of the familiar

“eye” type, $\frac{1}{2}$ in. diameter; two clear amber-coloured glass ornaments, with glass rings—perhaps ear-drops; 37 blue glass beads, cubical with bevelled angles, and 34 blue glass discs—all these together probably forming a necklace; a beautiful dark blue glass jug, $4\frac{7}{8}$ in. by $2\frac{1}{2}$ in. (in broadest part), the mouth $1\frac{1}{4}$ in. across; a roughly shaped disc of thin whitish glass; and a bone slip, in four pieces, $5\frac{3}{8}$ in. by $\frac{3}{8}$ in. by $\frac{1}{16}$ in., cut out so as to leave the letters—(SOR) O (R) AVE VIVAS IN DEO. These objects are figured on Plate VII., which is enlarged from a photograph. The inscription, the words of which will be familiar to all who are conversant with early epitaphs, proves that the girl thus buried was a Christian. The stone coffin, a very rough one, was not inscribed: possibly the burial took place in times of persecution when it would have been dangerous to have allowed the local authorities to see it bearing a Christian inscription. No mouth coins were found—and their absence is natural in a Christian interment. The object of the glass jug and disc must remain a matter of conjecture, but we may hazard the supposition that they formed the cruet and paten for the *Viaticum*. The coffin is placed near the ruins of S. Leonard’s Hospital in the Museum Grounds, and the bones and objects (see Plate VII.) found in the coffin are preserved in the museum of Roman antiquities.

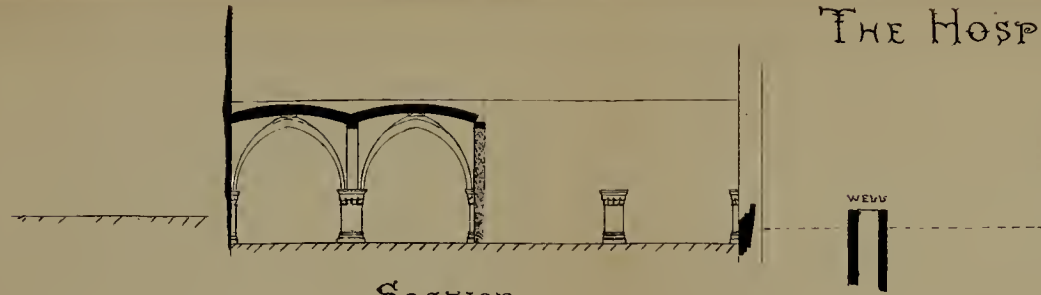
An interesting little hoard of Roman coins was found by Mr. John Harrison in cutting a drain (2 ft. 6 in. depth) on the “Flower of May” Farm, 200 yards South of the Roman Road (Malton “Street”), connecting Derventio (Malton) and Isurium (Aldborough). The coins were of the reigns of Theodosius, Honorius, Gratian, Valens, Valentinian, and Constantine. They had apparently been buried in a bag, probably a leather one, but the material of the bag was so rotten that it would not bear handling.

PRESENTED

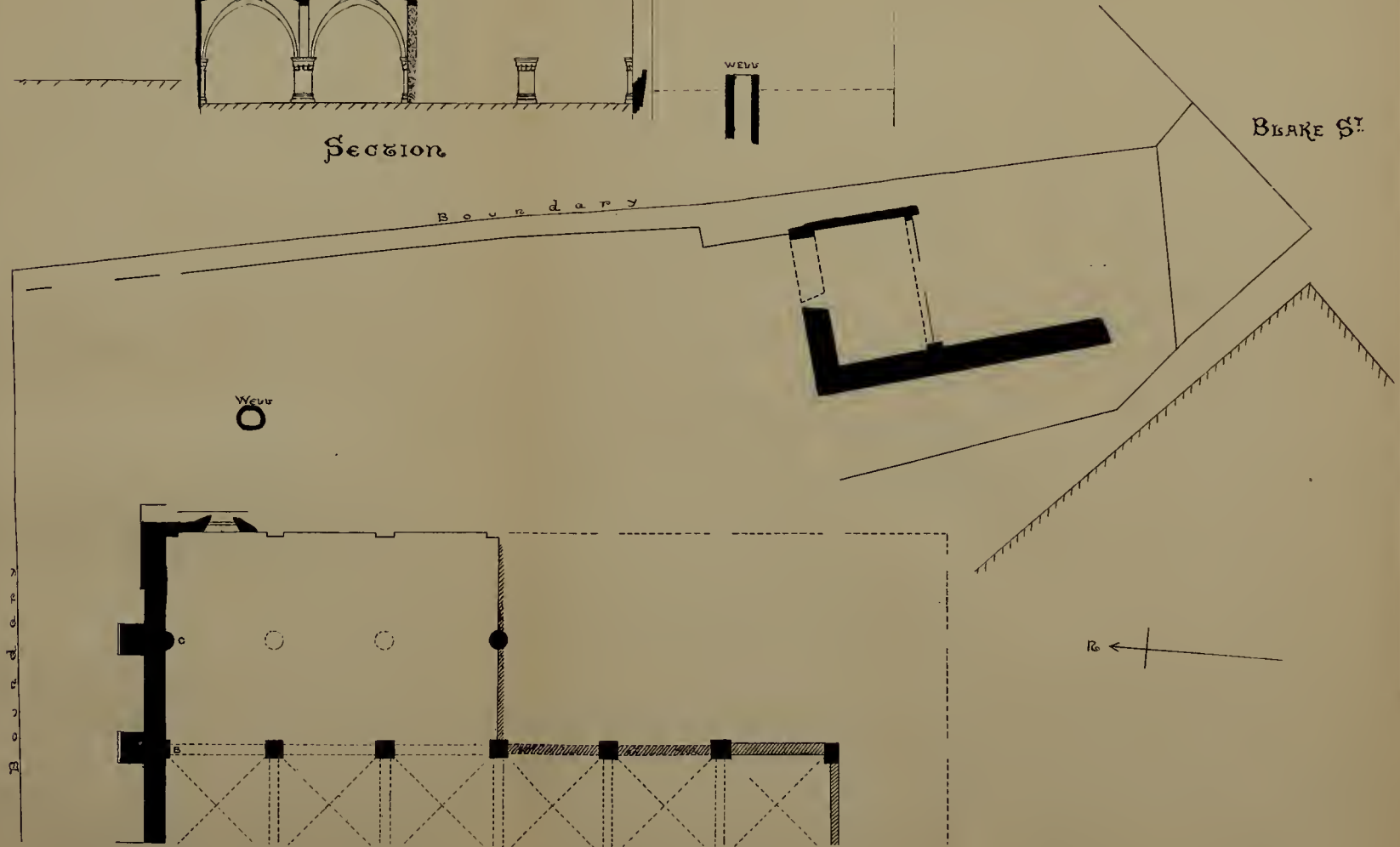
10 MAY. 1902



THE HOSPITAL OF ST PETER - YORK -



Section



BLAKE ST



0

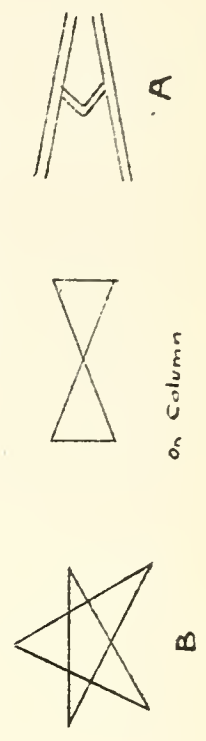
7" deep and about 14" long

Few Bricks in Rubble deep Red
10½" x 5" x 2" thick

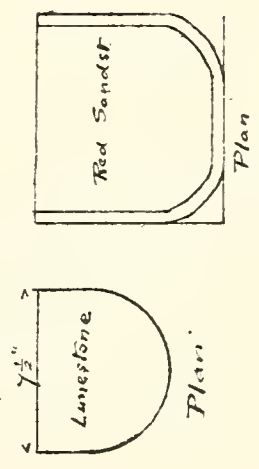
While in North



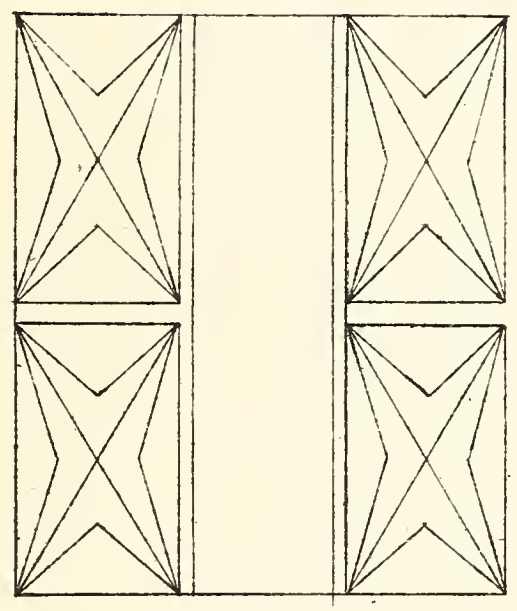
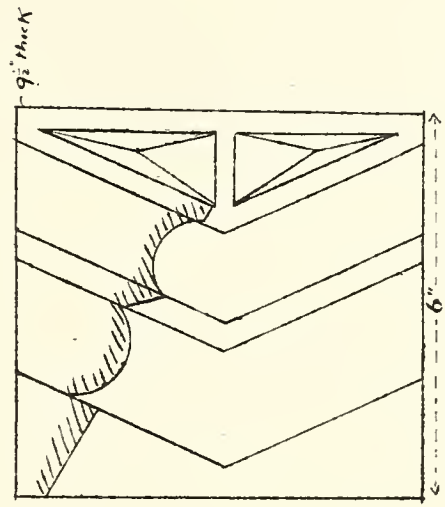
Mason's Marks



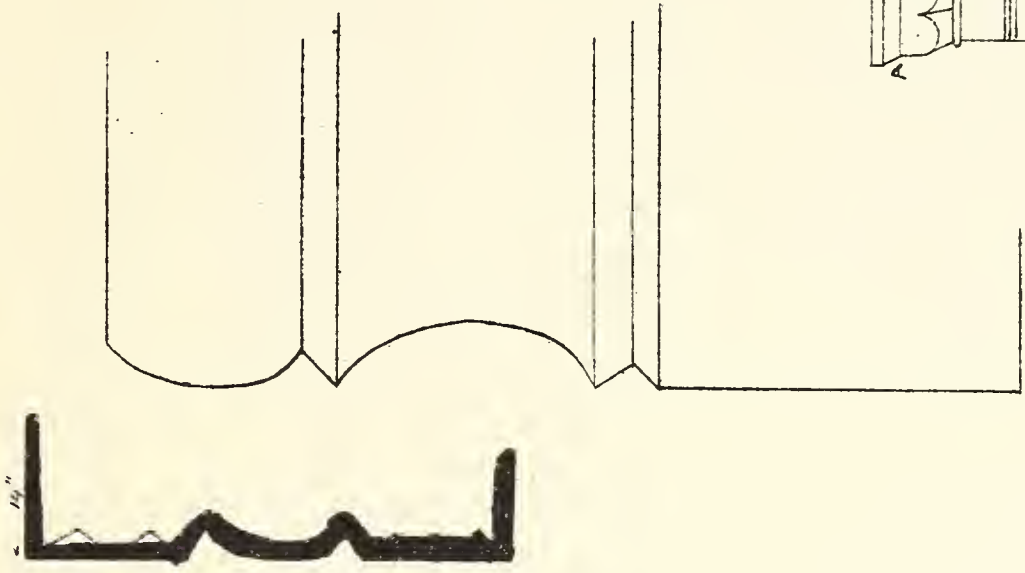
Two Small Bases.



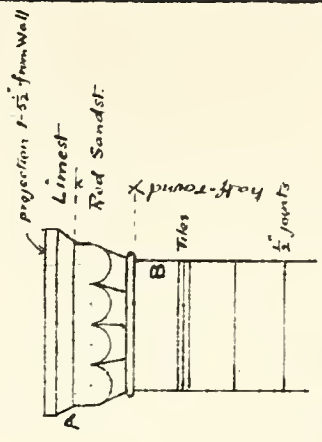
Two Carved Stones



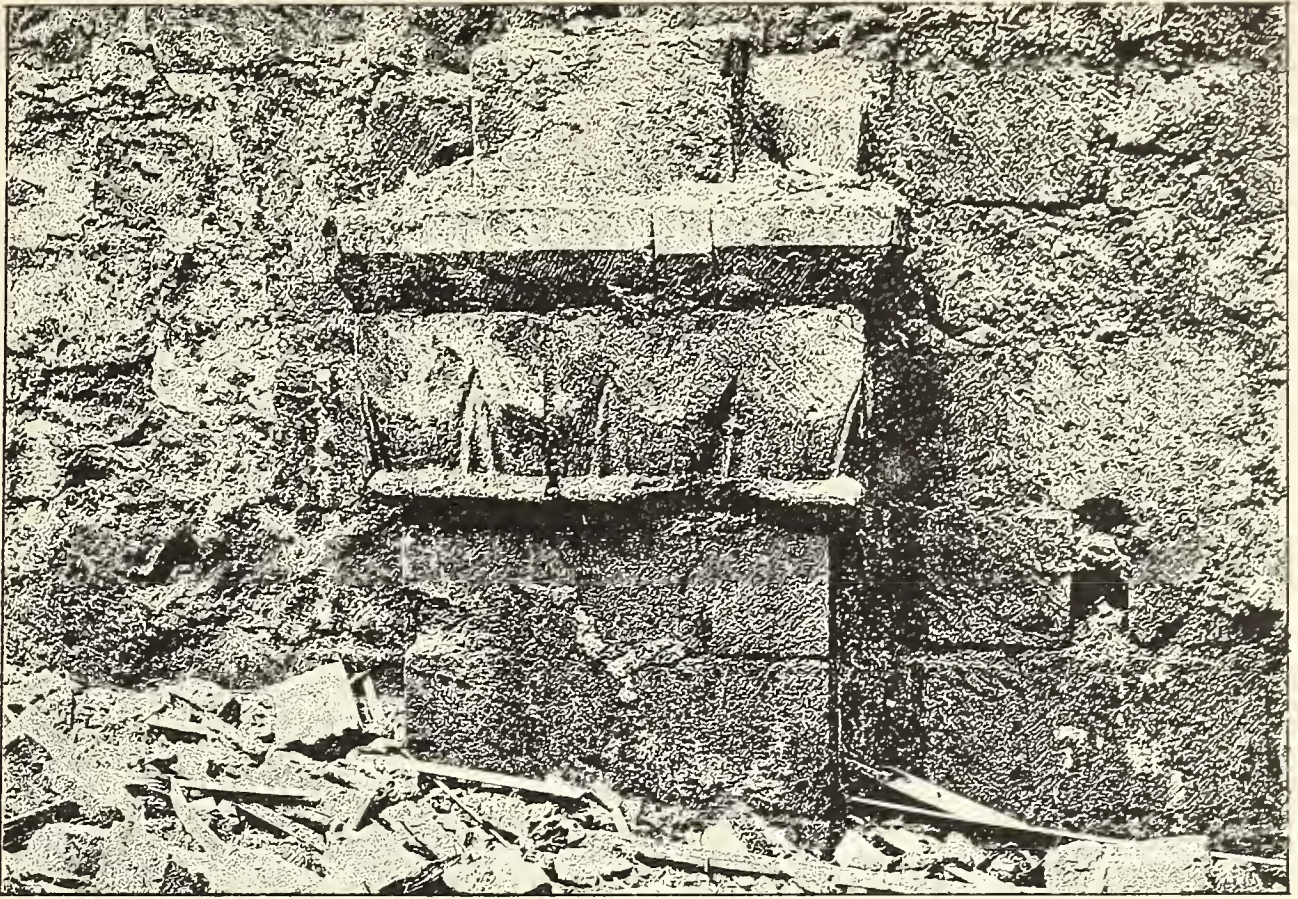
Base



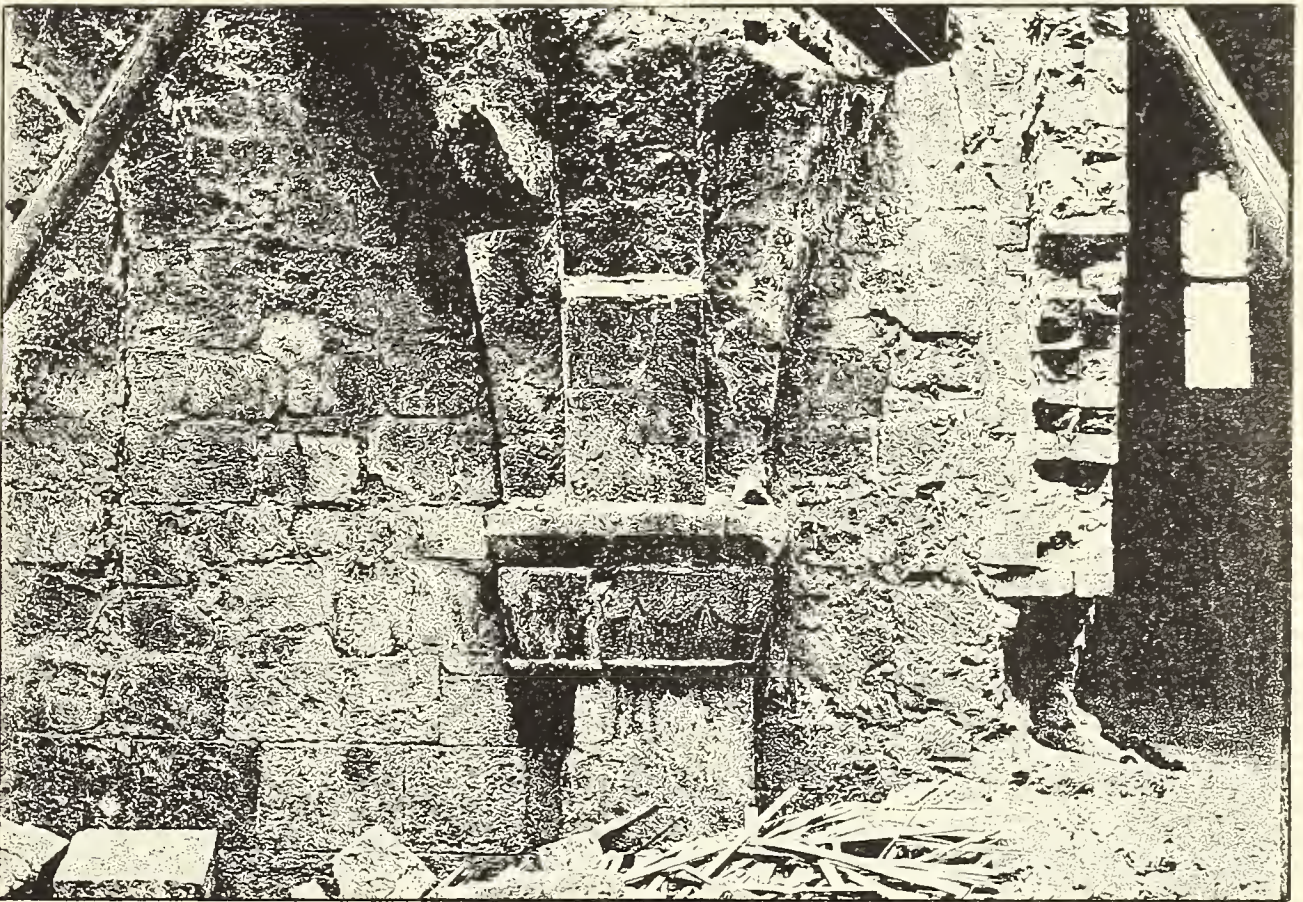
WALL SHAFT C



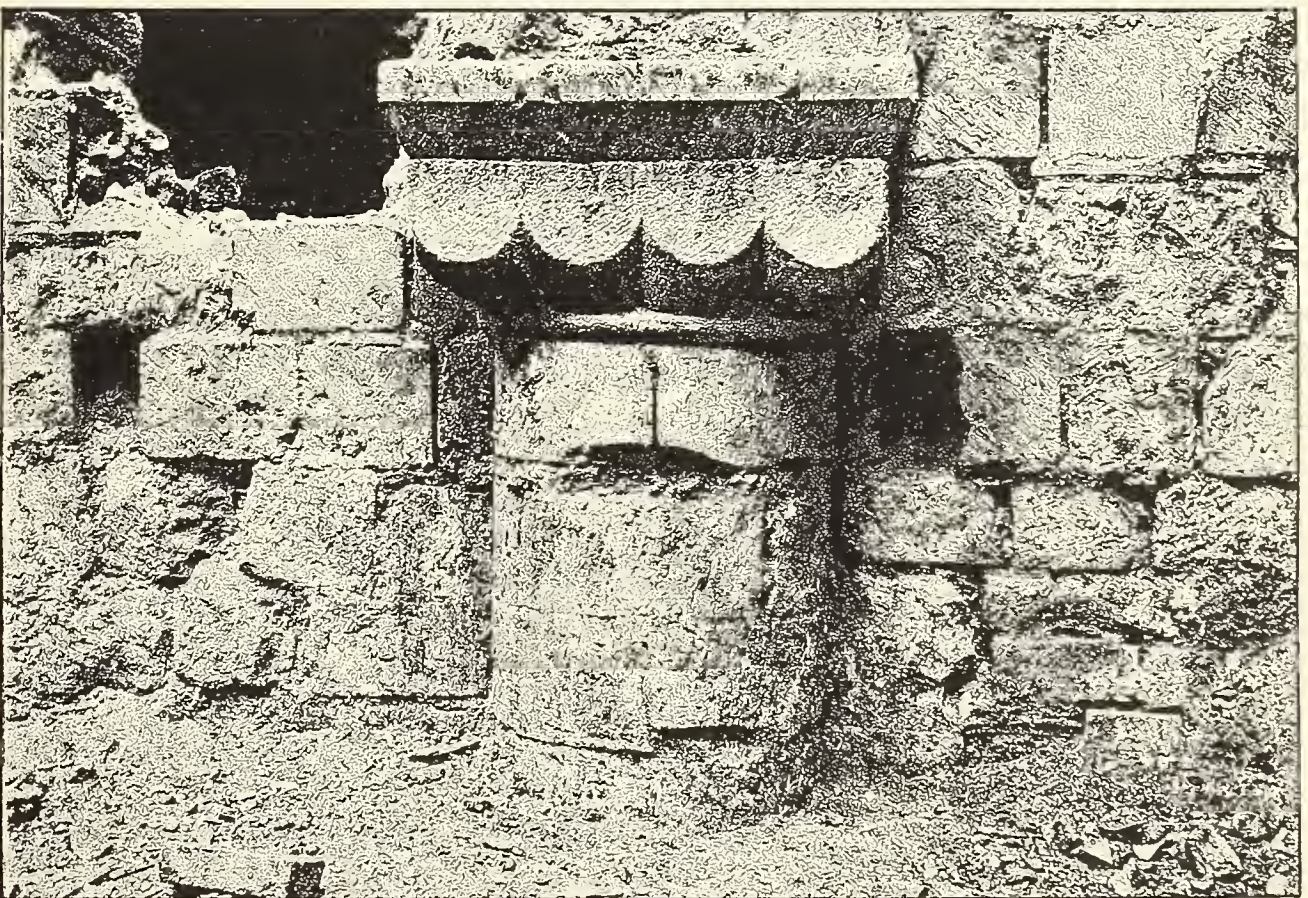




B



A



C

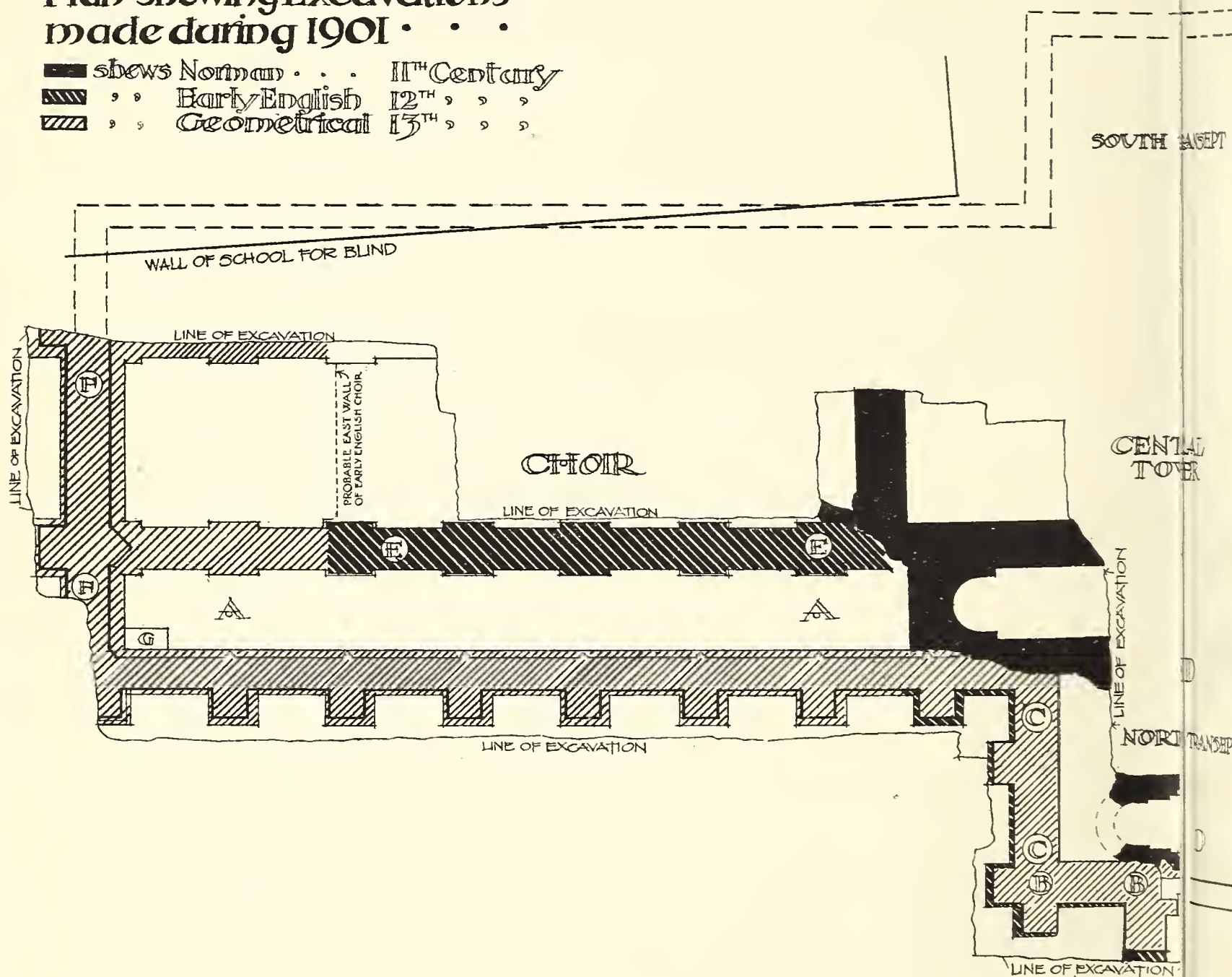
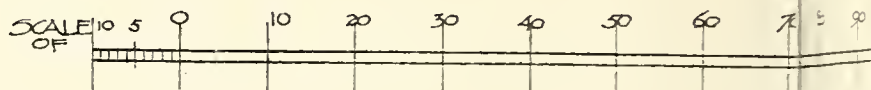




ST. MARY'S ABBEY YORK

Plan shewing Excavations
made during 1901 . . .

■ shows Norman . . . 11th Century
 ▨ ' ' Early English 12th ' ' ' ' ' ' ' '
 ▩ ' ' Geometrical 13th ' ' ' ' ' ' ' '



70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 FEET.

TRANSSEPT

NTIAL
OWER

TRANSSEPT

D

ION

DOTTED LINES SHEW
POSSIBLE OUTLINE OF
SOUTH WALL . . .

NAVE

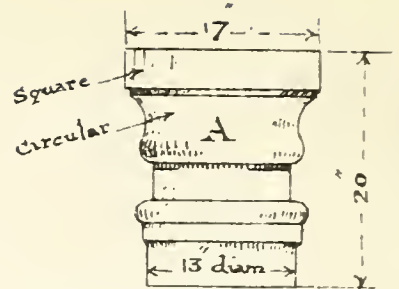
DIAGRAM OF
EXISTING NORTH WALL.

18TH MARCH 1902.

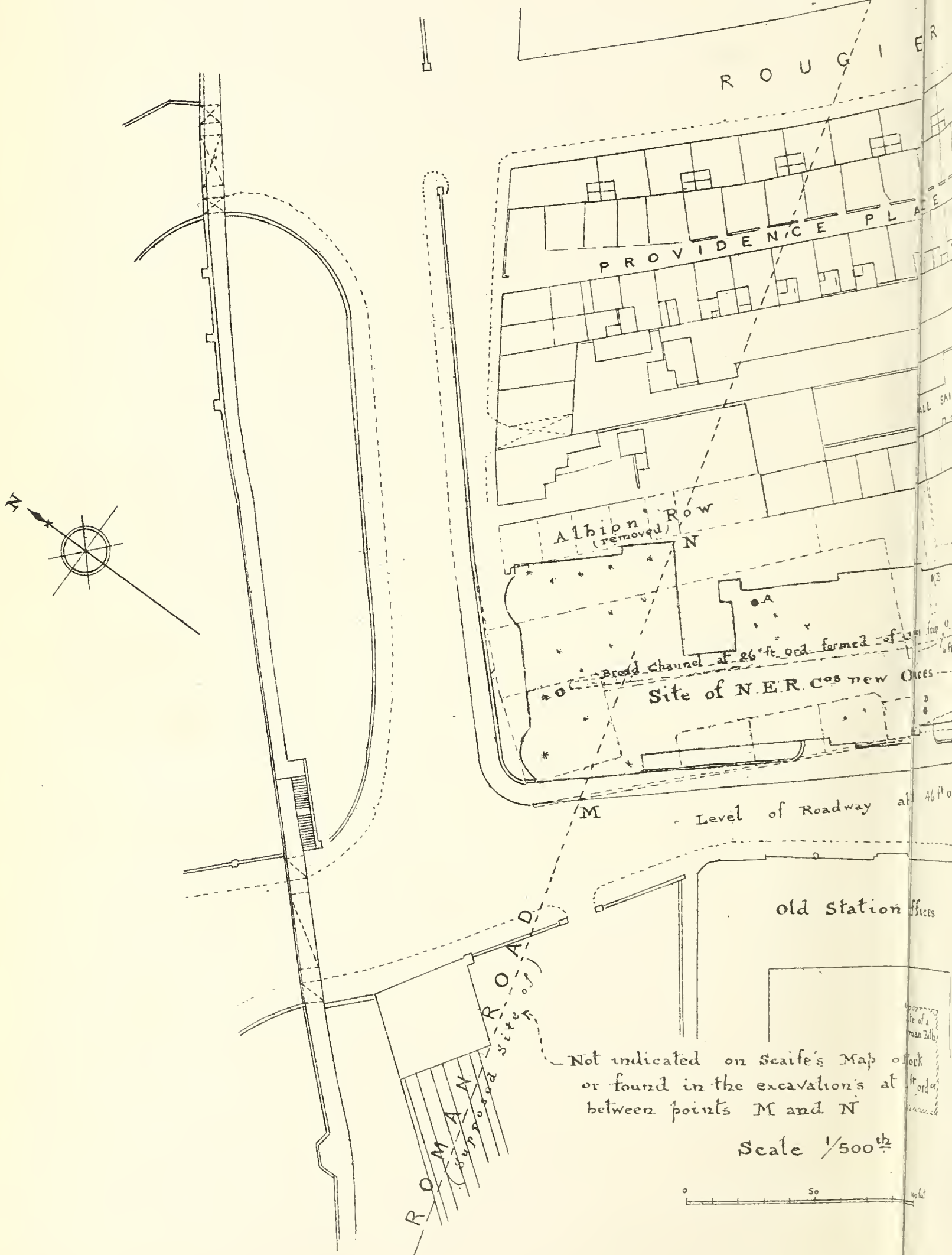




N.E.R. YORK OFFICES



Detail Sketch of A
3/4" scale





A { Column Capital found at 26 ft Ordnance (ie 10 feet deep below the floor of the old Malthouse) 6th July 1900 a similar stone to Hursforth

C { Column Cap of a similar stone to the Cap A but much defaced

B { Square Capital with carved 'Acanthus' leaf enrichment

D.D = oak Stakes & Piles at 25 ft Ordnance

E. { A Pit about 5'0" x 4'6" formed with 3" oak Slabs placed vertically at 18 feet Ordnance.

F. { Segmental Conduit about 3 ft across x 5 ft long, formed of worked Stones 12" thick Invert at 24 ft Ordnance

G.G. { Portions of old Walling formed 2 courses worked Stones size 3 ft x 2 ft x 1'6" deep 27 ft ord.

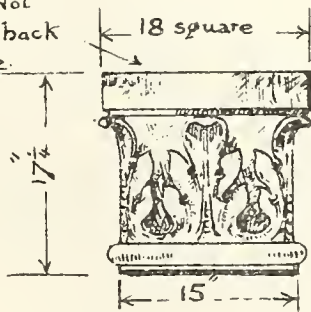
H { Stone Wall similar to G, with a Well beneath it 3'6" diam & built of pitch faced stones. Depth uncertain full of mud Covered with oak slabs at 23 ft ord

J.J { oak Piles about 6 ft long Tops at 29 ft Ordnance Two Piles shod with iron.

K { Block of Masonry 9 ft x 5 ft x 3 ft formed of stones 3 ft x 2 ft x 1'6" thick Top 29 ft ord

Broken pieces of Roman Pottery chiefly "Samian" have been found in many places as at * * *

L = Small Early English Base (Limestone built into a wall which crossed diagonally at this point.



Front view of B
3/4 scale

